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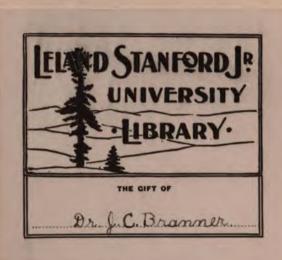
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LARUE







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BY

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The life center of society is the home. The life center of the home is the child. When a child is born into our home, he is almost as much a stranger to us as we are to him. Though we love our children at first sight, we do not so quickly learn their natures. Often do we misunderstand them, thinking, perhaps, in our error, that they have no inborn purpose or character. Each child is unique, and must grow up in his own way. Getting acquainted is a life-long process.

How can we discover and develop the best that is born in our children? How get them acquainted with their own future? The answer is sought in the pages that follow.



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THE MOST MAKING THE CHILDREN

THE UNKNOWN GIFT

"Afterwards I began to smile; first in sleep, then waking: for so it was told me of myself, and I believed it; for we see the like in other infants, though of myself I remember it not. Thus, little by little, I became conscious where I was; and to have a wish to express my wishes to those who could content them, and I could not; for the wishes were within me, and they without; nor could they by any sense of theirs enter within my spirit. So I flung about at random limbs and voice, making the few signs I could, and such as I could, like, though in truth very little like, what I wished. And when I was not presently obeyed (my wishes being hurtful or unintelligible), then I was indignant with my elders for not submitting to me, with those owing me no service, for not serving me; and avenged myself on them by tears. Such have I learnt infants to be from observing them; and that I was myself such, they, all unconscious, have shown me better than my nurses who knew it."

SAINT AUGUSTINE: Confessions.

You have received, as a gift from a far country, a rose of rare type. You know little

about it except that it is a rose; for no word came with it to reveal to you its kind or its requirements. You are anxious to save it and bring it to bloom; but what shall be done? You wonder what sort of nature lies hidden in the mysterious currents and forces that flow through it and maintain its being. As you try to picture its future, you realize that you can not make that future what you will: the rose must grow into its own future. You can easily destroy it; but if you hope to draw forth its best, you must be its watchful servant.

You have received, as a gift from a far country, a child of unknown nature. No message accompanied him. You are anxious that he shall attain to all good things; but as you try to picture his future, you realize, if you have the wisdom of the good gardener, that you can not make that future what you will. The child must attain his own destiny. You may easily destroy him by a single blunder; but if you hope to draw forth his best, you must be his watchful servant, acting with the authority of a master.

How thoroughly you realize the limitations of your power, as you see the rose developing

THE UNKNOWN GIFT

according to its own sweet will! You learn to study its traits, to read its wants, to discover its floral aspirations, and to measure the effect on them of any changes you make in the environment. You learn that your only hope is in discovering and furnishing the most favorable environment; but the ideal of the rose lies in the rose itself. This also is true of the child.

As gardeners, we should find our problem much complicated, if our plants, on reaching a certain stage of growth, began to gambol about and resist our kindly attentions, and finally left the nursery altogether. The plant has few traits, and these are clear-cut and easily analyzed. Thoughts and feelings the rose has none: it will never bow to your wisdom, nor blush in shame, nor be contaminated by the conversation of the vilest. But the child is a mosaic, a multi-mosaic, of a myriad of traits that flow into and mutually influence each other.

In addition to all this complexity of pattern at the beginning, there are often kaleidoscopic shiftings that come with the changing years. The ugly duckling becomes the swan, and unfortunately, the young swan

sometimes grows into the ugly duck. The homing instinct may turn to wandering, while he who wandered may turn homeward. Yet all these startling possibilities were present in the personality at its beginning, could we but have seen them, as the full flower lived in the bud that produced it.

It is no wonder that we often fail to see, in the beginning, what our babes shall be. Sandow, strongest of men, was a weakling when a child. Henry Ward Beecher was laid aside at birth as unable to live; but he persisted in the contrary opinion. William Cullen Bryant's father and father's father were physicians, and he was named for a great physician. But he followed law until he could maintain himself by literary work. Robert Fulton, painter of portraits, went to England to study under Benjamin West, met Rumsey, gave up painting, and became the inventor of the steamship and the submarine.

It is ours to wait, and watch, and work ever for the development of the perfect growth. The child-gardener has the most difficult task known to man. No other single problem in science or art will ever equal it. But paren-

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tal love, like charity, should hope all things, believe all things, endure all things.

Even with thoroughly devoted hearts, the task of child culture is difficult enough. It would be ideal, in a way, if each new-born were accompanied by a book of instructions, explaining his make-up and giving definite rules for the conduct of his education.

However, it seems safe to draw these two very common-sense but highly important conclusions:—

- 1. Our first duty is to watch for and challenge forth all good traits, instincts, interests, abilities.
- 2. Our second duty is to develop these traits, by every means in our power, in such a way as to give purpose, unity and efficiency to the growing life.

Our watchwords, then, are discovery and development.

II

THE TYRANNY OF FALSE IDEAS

"A little child shall lead them."

How we behave toward anything depends on the idea we have of it. A thought sets off every high act. Shakespeare would have been about right if he had said, There's nothing in our behavior, either good or bad, but thinking makes it so. Of course, we sometimes work mischief by failing to think at all.

The Indians misconceived gunpowder and planted it, expecting to raise a crop for the next war. Sir Walter Scott had a misconception of illuminating gas when it was new, and wrote: "There is a madman in London proposing to light London with—what do you think?—smoke!" Later, when Sir Walter had corrected his conception, he lighted his own house with this "smoke."

If husband regards wife as cook and scrub

THE TYRANNY OF FALSE IDEAS

woman, and if wife regards husband as payer of bills, their home will be vastly different from one in which each regards other as spiritual companion. So, what we do with our children depends on what we think those children are. If the child is a bit of plastic human clay, let us mold him and make men to order; if the clay is likely to set soon, let us work fast and furiously, that we may form genius at pleasure. Is the boy so much new ground to be tilled? Then we must plow and harrow with rigor. Is his brain a kind of mental stomach? Then we must feed, but not cloy it, nor bring on indigestion. The baby is an angel: worship and obey him: a demon: subdue and purify him; a colt: let him run wild.

So much depends on getting the right concept that we should keep our minds open, as the gardener does in dealing with the new type of rose. A quick conclusion may mean an everlasting failure. We must let the little child lead us, and himself teach us what to do with him.

There are so many dangerous misconceptions abroad concerning child life and education, that we shall proceed most safely by

first correcting them. Some of the most widespread of these misconceptions are:—
1. That the child is a miniature adult.
2. That all children are alike. 3. That we can make anything we please of any child.
4. That there is a fixed body of knowledge which constitutes "an education." 5. That money-making or fame is of course the most desirable career. 6. That whatever the parent has found good or bad must necessarily be so for the child.

We shall deal with these in order.

1. Is the child a miniature adult? The boy is often thought of as a manikin. A child is supposed to bear the same relation to an adult that a little dictionary does to a big one, or a little tree to one of full size. In body, in mind, in behavior, we expect to find our own reduced image; but in all three respects we are wrong.

If an infant were magnified to the height of an adult, but retained the infant's proportions, "the skull and face would be enormous, the neck long, the shoulders low or almost absent, the thorax narrow laterally but deep from front to back like a quadruped, the arms and especially the legs short, the

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hips small and feeble, etc." * The brain comes to its full weight by the age of six or eight; but weight is of little importance as compared with that complexity of structure which accompanies the development of intelligence. Such complexity increases up to the age of forty or fifty, at least. The younger the child, the more nearly is his nervous system on a level with that of the lower animals.

The same is true of his mental life, and of his behavior. Often, when a child does something surprisingly good or bad or smart, parent or teacher assumes that back of the performance lies the same shrewd insight and intelligence, the same saintly or damning motive that we should find in ourselves. Too often, we deal out the kind of punishment that would fit an adult, and give free play to our resentment. But the pranks and tricks of a child are more like those of the colt or the puppy.

Our children are not vest-pocket editions of ourselves.

2. Are all children alike? When some advocate of a new education tells us all chil-

^{*}G. Stanley Hall: Adolescence, vol. I, p. 60.

dren are possible geniuses, we think him a genius, and glance proudly round the family circle. But if any one dared to say all children are born fools, we should quickly conclude that he was right in his own case, at least.

Sooner or later, the mathematician catches up with all who make such reckless assertions. He has caught up in this case. The general distribution of traits in society is known. Gather ten thousand men at random, and the statistician can tell us, without measuring a man, approximately how many of the ten thousand are five feet six inches, how many five feet seven, and so on for all heights represented.

Everything known goes to show that such a trait as general intelligence is distributed in the same way. Putting it roughly, about one-half of the two hundred fifty thousand children born each year in the United States are of average, or mediocre, intelligence; one fourth grade from this up to "genius," the other fourth down to feeble-mindedness and idiocy. And there is not only a difference in degree of talent, but also a difference in kind.

Our schools are waking to a new mis-

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sion, an undertaking in which parents, however little they know about teaching, can render indispensable aid. This new work consists in finding the individual traits, the special bents, the peculiar powers of every child, and basing his education on them. As Eliot of Harvard put it: "We know now that it is greatly to the interest of society to discover and utilize the man, ordinary in other respects, who has the little gift of determining with certainty the commercial value of different sorts of wool merely by rubbing them between his sensitive fingers. . . . We know that it is for the interest of society to discover and train every man who has the peculiar eye to recognize by tints, which tarry but for an instant, the right temper of a steel drill. . . . The greatest natural gifts reveal themselves, and the genius is, as a rule, independent of institutions of education. It is the humble, small, inconspicuous, but vastly more numerous, peculiar individual endowments which systems of education should take infinite pains to bring out. Uniformity in schools crushes and buries them. " *

^{*} Educational Reform, p. 280.

3. Can we make anything we please of any child? Teachers often assert that we can, and parents often believe it. The father plans the life occupation of his infant son, and some schools undertake to give an advance inventory of what items of information the pupil shall have in his head at the summer solstice ten years hence.

Suppose we establish a school for dogs, and plan to turn out a uniform product, made to order. On request, we will teach the terrier to give up rat-catching and take on the habits of the St. Bernard. The bloodhound shall become a lap dog and the poodle shall be reformed into a shepherd. Naturalists find three types of dog, which we may call the bold, as the bulldog; the swift, as the hound; and the wise, as the shepherd and the spaniel. If we attempted to combine all these inborn qualities of boldness, swiftness and wisdom in every dog graduate, it would picture what the school too often attempts.

Dogs would leave such a canine school if they were not chained. Does the human school succeed in converting all to its one comprehensive ideal? More than half the pupils who enter the first grade fail to finish

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the eighth, and less than a tenth graduate from the high school. Moreover, various investigations show that only about a third of those who leave school do so because of economic necessity. "The chief cause is undoubtedly dislike for school work." They cannot endure being made over on a new plan.

Nor are the schools alone to blame: they will cure the ailment as soon as the public will pay the price. The point is, we have had too much faith in what we can do by merely shifting the environment. But shifting the scene does not create the actor. Linnaeus, as a boy, spent much time in his father's fine flower garden. Did this alone make the boy a botanist? Then let us make more great botanists by catching boys and lodging them in greenhouses!

4. Is there a fixed body of knowledge which constitutes an education?

The day when one could master all knowledge, is past. It would require about fifty years of a student's life to complete all the courses now given in a large college. Evidently, some choice is forced upon us.

This choice would be easy if we could make *George B. Mangold: Problems of Child Welfare, p. 240.

a list of all the general faculties of the mind, and then find some one branch most necessary and efficient to develop each faculty. But this has never been done, and does not seem at all likely to be accomplished. Mathematics is commonly supposed to be a general developer of the reason; but experiment indicates that those who star in that subject do no better, sometimes less well, in the practical reasoning of every day life, than those who stand low in mathematics. Education should have no patent medicines: every case ought to be specially diagnosed.

Expert dietitians, with all their amazing knowledge of organs, processes, calories, chemicals, food values, tell us they can give no better general rule of diet than that each shall follow his appetite rationally. The educator joins his voice with theirs: choose your education, as your food, by thoughtfully following your natural tendencies.

We must recover from the idea that all girls must have piano and French, or even be adept in domestic science or art. Each soul has its own line of growth. School and home should be joint laboratories and experiment stations, whose first business is not so

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much to educate as to find out what is there to be educated.

5. Are money-making and fame the chief desirables? Perhaps so, for a few; but we should hope for better things.

Unfortunately, some seem incapable of anything better than the mere piling up of goods. Like other well-meaning animals of a lower order, they have the collecting instinct over strong. Plutarch says of Themistocles: "Of two who made love to his daughter, he preferred the man of worth to the one who was rich, saying he desired a man without riches, rather than riches without a man." Democracy makes the same choice: her first demand is for men: wealth is an accident. If we are to have an efficient social body, we must not all exercise ourselves to become one great grasping organ. Each must play his part according to his talent: unfortunate is he whose horizon is bounded by the circumference of a dollar.

Fame should be the by-product of great service. Curbstone fame is nothing: for what boots it if we all shout each other's names! Were all famous, fame would have no meaning. But he who finds men coming

to his door and calling him, should hear and answer with his best.

6. Can a parent judge, from his own experience alone, what will be good or bad for his child?

The father profited by a classical course, and inflicts on his son the same course, at the same institution. But we are not sheep, that all should seek the same pasture. The son may require a different learning, or less, or more.

"I had to work hard, but my child shall have an education and escape work," so runs the common wail. But many a child can best work out his life purpose through muscular toil. Who of us desires more than a chance to work with hand or brain, in his chosen way, and to enjoy the reward of his effort?

We must conclude that each child is unique, and not a mere duplicate of an old pattern. It is essential to find, as Emerson expresses it, "an antagonism in the tough world" for all his faculties, or they will never develop. He must be challenged to assert himself. To change the figure: each man is a machine of a new kind, and he should be belted to the universe in the most efficient way.

III

PARENTAL PURPOSE

"Let me but do my work from day to day,
In field or forest, at the desk or loom,
In roaring market-place, or tranquil room;
Let me but find it in my heart to say,
When vagrant wishes beckon me astray—
'This is my work; my blessing, not my doom;
Of all who live, I am the one by whom
This work can best be done, in the right way.'

Then shall I see it not too great, nor small,
To suit my spirit and to prove my powers;
Then shall I cheerful greet the laboring hours,
And cheerful turn, when the long shadows fall
At eventide, to play and love and rest,
Because I know for me my work is best."

HENRY VAN DYKE: Work.

WE may say there are four kinds of parent, spades, clubs, diamonds, and hearts!

The spade is constantly plunged into work. He is too busy delving to stay his pace, look about, and see what his family is doing. He regards his children as fixtures, and they regard him as a formidable kind of hired man. He buys clothing and food for their bodies, but their souls may go naked and starving for all of him.

By the club parent is meant, not one who sanely enjoys his club membership, but the club worshiper, one who is led about and enslaved by the social or the migratory instinct. Too proud to loaf on the street corner, he enjoys the same luxury in hotel or club room, where there are more creature comforts and less public inspection. The club mother unselfishly places her neighborhood duties first, her children second. Both husband and wife are good fellows when you come to know them, — but their children know them not.

The diamond is he who seeks the glitter, wealth, pleasure, reputation. He will shine somewhere at all costs. But he does not, like Cornelia, regard his sons as his jewels. His home is rich, even if it is mortgaged. Some of his children live in it; others may be found wherever the wild oats sprang up. Too often, the children of Diamond parents remain unborn possibilities; and the world would be better if many such parents would return and abide with these their children.

The heart parents are essentially home makers. They have a table, a fireside, a crib, a library. Work is welcome; social move-

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ments are supported; Pleasure sits there and sings: these have attained all that which the others are vainly seeking. They have found the elixir of life, for they daily relive their youth in the lives of their children.

The delver would leave his children houses, lands, and other such trinkets, heedless of what a cruel joke he plays when he robs the soul of its treasures and leaves these poor substitutes. The society-seeker and the pleasure maniac have no time for their children who are under twenty-one; and when that age is reached, these children, if they are wise, will have little time for their parents. But he who has a heart interest in his young, wishes, above all else, to place them in command of their own fate.

What do we wish our parents had done for us? Certainly, we do not wish they had tried to make us over according to their own ideas. Nature formed us; and he who attempts to compete with her will find he has come too late. They could not fashion our ideals as they decked our bodies with clothing. It is folly to hang your favorite fruit on the tree and pretend it grew there. No: the ideal that is blooming and fruiting in us, lay in the

bud of our babyhood. As in nature, so in human nature, the autumn lies hid in the spring. We are grateful to our parents and teachers in so far as they endeavored to discover our possibilities, and encouraged us to develop the best they found. We had to grow our own arms, heads, thoughts, feelings, characters, abilities, careers: they supplied the conditions.

Is there any light that we can throw across the path of our little ones? We, with our children, are like a farmer who has goodly acres lying beside a great market. If he has no care for his farm, it may be shrouded with weeds. If he consults his tastes only, he may cover his fields with flowers. And this might be praiseworthy if the people of the city were not suffering for lack of vegetables. Or, if he consults the market only, and attempts to produce what brings the highest price, he may foolishly set his chilly acres with orange, fig, or banana, and end in disaster. He must find a crop that his fields are fitted to produce, and he must meet the

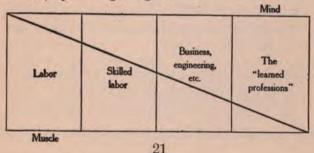
So, our child has goodly talent, and the world is the market. If we have no care for

demands of the market.

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him, his talent may be choked with tares. If we consult our tastes only, he may bloom with idle graces and fantastic accomplishments; and this might be praiseworthy if the world were not crying for service. Or, if we look to the world only, and attempt to enter him in one of the ways of wealth, we may find these paths are such as his taste and talent do not follow. Yet, if he is to earn a living, we must adapt his ability to some such service as the world rewards. The world and the worker must meet.

In a general way, we can distinguish four kinds of service, and four kinds of servers. Man is fundamentally a hand and a brain. He works with mind or muscle, and with these in varying proportions. We can illustrate the four types of worker, mentioned above, by a simple figure:—



Below the diagonal is "muscle;" above it, is "mind." From "labor," which demands a maximum of muscle and a minimum of mind, we pass through occupations which require less and less of muscular force, but ever more of skill and thought and fine emotion. The laborer deals more directly with things; the mental worker deals rather with persons, with other minds. Labor is the hand of society; learning is its head.

But neither should despise the other. Nor should any parent lament because his child takes to labor, and try to force him into anything contrary to his nature. The boy who leaves the literary courses at school, to "go to work," may be doing the very best thing, for him. Better a good laborer than a petty and unsuccessful man of learning. Let us encourage our children to do anything honorable, but do it well. Whether their work is "in field or forest, at the desk or loom," let us teach them to say:

"This is my work; my blessing, not my doom; Of all who live, I am the one by whom This work can best be done, in the right way."

Then will they "cheerful greet the laboring 22

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hours," because they know, for them, their work is best.

Our first question should not be, How can I make my child into this or that? but, What has nature already made him? and How can I find this out? Unfortunately, we can not explore and map a child's mind as we can a continent. The mind is what it does; and it acts only when something stimulates it into action. What can we parents do to start the currents of behavior and find out which type of worker our child is destined to be? How aid him to achieve his destiny?

When Benjamin Franklin was a boy, his father went with him the round of all the occupations in Boston, that he might choose the one he warmed to most. When the weak boy, Sandow, saw the strong men of Greece and Rome on canvas and in marble, he yearned to be strong like them, went home to begin his exercises, and became the world's strong man.

Cases like these give us our cue. It is actual experience that tells the tale. Psychologists have invented bookfuls of tests, but although they are useful in a minor way, they are too petty to cope with human nature.

Life alone is the only thing big enough to test and measure life. The combined judgments of a watchful parent, an interested teacher, and the young candidate himself, form the best guide in existence.

Of course, no single experience, such as that of Sandow or Franklin, will suffice in most cases. There must be repeated exposures to the widest environment and the largest possible range of interests. Moreover, school and home should provide, not only contemplation of all human doings as fast and as far as they can be appreciated; but there should be sufficient participation in many kinds of activity to make them real. If you would know what a hill is, do not merely gaze at it, but climb it.

Once the senses are awake and the brain active, much of this necessary experience not only can be, but must be, gotten at second hand, through books. Whoever attempts to know the world without books, will never know it. We may sneer at education that is bookish, but we should weep at education that is bookless. These are days when one stows the world on his shelves, and opens his library door to take a trip around the globe.

IV

MENTAL MACHINERY

"And if we can go no farther than this . . . delineation of the distinct parts and powers of the mind, it is at least a satisfaction to go so far. . . And shall we esteem it worthy the labor of a philosopher to give us a true system of the planets, and adjust the position and order of those remote bodies; while we affect to overlook those, who, with so much success, delineate the parts of the mind, in which we are so intimately concerned?"

DAVID HUME: An Enquiry concerning Human Understanding.

Subtract the minds from our children's bodies, and we should care little for what was left. We are, then, "intimately concerned" with the way the mind works. He is a poor chauffeur who is ignorant of the engine he drives. So every parent of us who wishes to make the most of his children, should try to learn how their mental machinery behaves. And the larger mental operations are simple enough to be understood by everybody.

The mind is like a factory, which (1) receives raw material, (2) cuts it up according

to requirements, and (3) recombines it to form a new product. It is by keeping in touch with the outside world that the factory succeeds. Had its doors never received material from without, its wheels would never have turned.

Similarly, the mind (1) receives raw material, sights, sounds, touches, tastes, and the like, from the outside world; (2) works up this raw material; and (3) recombines it into thoughts, poems, arguments, history, the wit and humor of conversation, every kind of mental product. It is by keeping in touch with the outside world that the mind succeeds. Had its doors, i. e., the eyes, ears, and other sense organs, never opened to receive material from without, it would have had nothing on which to work, and would have remained inactive and speechless throughout life.

The taking-in process of the mind is commonly known as Observation. The psychological term for it is Perception. The splitting-up process may well be called Discrimination; the building process, Combination.

Observing, or perceiving, is simply getting 26

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experience from objects in our presence. All the senses help to collect our mental materials: we hear music, smell the rose, taste coffee, touch the table. Of course, the senses of sight, hearing and touch are most important, since it is through these gateways that we import the greater bulk of our mental contents.

Let one amuse himself by imagining whatever picture he will—say an ivy-covered castle of massive stones, surmounted by a bell. Inevitably, we find the old images, first brought to us by the sense organs. In the case of the castle, we find that the green of the ivy was contributed by the eye, the hardness of stone by touch, the tone of the bell by the ear. The man blind from birth never imagines colors as we do. It is impossible to develop a negative that has never been exposed.

By Discrimination, we analyze and break up our blocks of experience. To the baby, just beginning to discriminate, the world must be much like a runaway moving-picture show, with the machine out of focus. His mother's face, his milk bottle and a few other familiars, constitute his little world and stand

out against a background of cloudy confusion. Gradually, he discriminates more and more objects, learns that there are at least a few things which it is best not to put into one's mouth, and that "Papa" is just one man and not all of them.

We are all likely to remain poor discriminators in some department. One can not tell the common colors apart; another can see no difference between similar sounds, or even words; perhaps we get "mixed" easily in names and faces. To some, all foreigners look alike; and it is said that old bachelors can see so little difference in babies that they would as leave have one as another!

Education is largely a process of learning to make discriminations: here are the forms of the parts of speech, mathematical processes, species of plants, similar historical events, twin spellings, facts and processes of a thousand kinds, almost duplicates, but with just an earmark of difference for the discriminating. The physician must learn to discriminate symptoms; the lawyer, fragments of evidence and judicial rulings; the society man must be educated in silver-ware, lest he feed himself with the wrong piece.

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As the lumber or leather brought into a factory is cut into pieces, and these pieces are joined to form a finished product, so do we work over our mental material. Your child draws a horse with a man's head. How did he achieve this, how manufacture it mentally? He has perceived horses and men, discriminated their parts, separated heads from bodies, joined the human head to the equine body, transferred his mental picture to paper. This breaking up of our experiences into bits may be likened to the knocking apart of type in the print shop, preparatory to setting up new matter. As the printer notes likenesses and differences and puts like letters together into one case, so discrimination is fundamentally a noting of likenesses and differences; and we tend, in time, to classify like things together and keep unlike things apart. So comes order into our mental world.

Combination of mental material is of three general types, (1) Memory, (2) Imagination, and (3) Thought. They are distinguished by the kind of feeling that accompanies each.

(1) You have, let us say, a separate photograph of each room of a certain house. You can arrange these pictures in various ways.

Let us suppose you arrange them as the rooms actually were when you saw them, upstairs rooms above, the first floor below, and so on. This arrangement, or combination, gives you a feeling of familiarity, since it tallies with actual experience. If these photographs were mental pictures, we should say you were remembering. Memory, then, is the combination of our mental pictures in such a way as to reproduce some former experience and give us a feeling of warmth, oldness, familiarity.

(2) But you can arrange the photographs in another way, perhaps a fantastic way: you can bring the garret down to the first floor, and put the kitchen up under the roof. Never have you experienced anything like that! Such an arrangement of our mental pictures gives us a feeling of unfamiliarity, and we say we are imagining.

It is worth while to strengthen this power in children, even though it leads to the telling of fantastic tales of colossal events that never happened. To the child, the world is all new, both the *mental* and the *environmental*; and he does not discriminate so sharply between these two as we do, partly because

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there is little in his life that compels him to do so. Consequently, what happens in his mind only, is often accompanied by as great a feeling of familiarity as if it had been witnessed in the outside world. We must not brand him as "naughty" when he tells his dreams and imaginings as true. We should rather regard him as a little poet or novelist, for this is the very faculty these creators of literature use. It is also one of the most valuable assets of the staid and sober thinker. since he must picture many possible theories before he can select the true one. This, which we may almost call the ideal-building power, is all too rare. It should be encouraged, exercised, fed with stories both true and fanciful.

(3) Finally, we can so combine our mental pictures as to make us believe they truthfully represent things not present here and now. You may be able to rearrange your photographs of the rooms of a house in a new and better way, a way which, you feel sure, could advantageously be carried out in erecting a new building. This feeling of reliability which accompanies such picture-forming, is characteristic of thinking.

The British Admiralty have a map of the world on which they place a miniature ship to represent each vessel of their navy. Each ship is moved on the map as its great original moves on the sea. So the thinking mind is a map that attempts, for the most part, to picture the events of the outside world, and picture them truthfully. He is the best general who can tell what the enemy is doing on the other side of the hill. He is the best editor who can see where news will break out next, and has his reporter there waiting for it.

Now, what bearing has all this psychology on the future of our children? Much every way. To begin with, there are one-story, perceptive minds, two-story, discriminative minds, and three-story, constructive minds. Some of the lower animals have all our sense organs, and seem to perceive much as we do; but beyond perception, their powers are limited. The dog, probably man's most intelligent brute friend, shows considerable discrimination as to whom to bark at, whom to wag to, what must be guarded, and what is his to consume. But thought of any profundity is beyond the animal kind. What-

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ever they deal with must be now and here. They do not picture the wide world and the distant future in their heads, as man does.

All begin on the one-story, animal, perceptive level. The crucial question is, How far can our child build above that level? Can he ever learn to discriminate between mine and thine in property; between words and phrases apparently alike, but of different significance; between the good and becoming, and the bad and disgraceful? Can he remember well, dream the dreams of the seer, lay thought on thought in goodly logical structure? How far he can go in this direction must determine what we attempt to do with him. It is folly to think our geese are swans, criminal to mistake our swans for geese.

Further, since it is impossible for any one to master the whole world of knowledge, that part of it which attracts him most is an index to whatever genius he has. What things can your child best perceive, discriminate, remember, imagine, give thought to? The dyer and the artist respond to colors, perceiving and discriminating many more than the aver-

age eye can see. The musician does the same with tones. Charles Lyell's parents sent him to Oxford to learn law, but he became a geologist. Darwin's father intended him for the church, but he found his salvation in science.

Probably constructive ability, the power to combine, build, synthesize, is most suggestive. It is not so much what a child knocks to pieces, as what he tries to put together, that counts. It meant much when the boy Stephenson began to make clay models of the engine at the colliery. Gainsborough, at an early age, identified a thief by sketching him. Turner, when a child, made pictures which his father sold. The father would have had him a barber; but he served the world in a larger way by preserving its sunlight on canvas.

Not always, however, does the chief life ability bloom early. Cromwell was a farmer at forty. Robert Owen's great desire was to go to sea, and Huxley wanted to be a mechanical engineer. Both became naturalists. There have been compiled whole lists of the distinguished who, in childhood, showed deceptive talent, or none at all, if we may trust

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their teachers. The sluggish and ugly bulb may contain a splendid flower.

Persistence and pleasure are the signs to look for here. What the growing boy or girl returns to repeatedly and performs with pleasure marks the line of next development. The newsboy, Edison, set up a little laboratory in the corner of the car in which he traveled. Later, when asked about his work as an inventor, he said: "I like it. What I have begun is always on my mind." Plutarch says of Themistocles that his holidays were spent on orations and declamations; and he always paid special attention to whatever would help him in the practical management of affairs, in which he wished to excel.

We sometimes hear "attention" and "concentration" extolled as if they were magic mental keys that will open the door to success. And so they are, provided we use them on the right door. But (changing the figure) we can not direct a child's interest and attention in any arbitrary way we please, as we can turn a searchlight to illumine any part of the landscape. We may as well ask water to concentrate all its energies

on flowing up hill as to exhort a saint to concentrate his efforts on money-making, or the mere money-maker to give his whole attention to being a saint. It is important to attend and to concentrate, but even more important to find the direction in which each individual's talent naturally turns. Get one into his chosen channel, and attention and concentration are likely to take care of themselves.

What can we do to aid and perfect these processes of perception, discrimination, and combination? No set apparatus is necessary. Granted a set of kitchen utensils, varied and wholesome surroundings with freedom of action, a mother who has the gift of song, the spirit of play, and the power to command, and primary education is well begun. There is no magic sleight or twist by which the life can be formed, in these early years, so that it will keep shape, without further effort, for the whole future; no danger, in the environment described, of any awful omission, during the first seven or eight years, at least, that can not be made up later.

We must learn that, contrary to the common opinion, the child's memory is not so

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efficient as the adult's; that as a rule he, like the adult, can save time by first understanding what he is to memorize; that each memory should be permitted to choose what it can work on best—our children should be allowed to select their own memory gems. And if these gems are read or repeated with good expression during the learning, there will be no "sing song" at the exhibition hour. One should go through the same process in learning as in reproducing.

While experiment shows that the rapid learner remembers best, yet great memory and intelligence are not necessarily found together. The poor memorizer may excel in thinking. Experiment shows also that school, with its gorging of the memory, does little, if

anything, to improve that power.

Scientific study has revealed comparatively little, as yet, concerning the culture of discrimination, imagination and thought. But it is safe to say that a wide range of environment and of reading is most desirable. One reason why some men struggle slowly into their vocations is because their tendencies and abilities were not sufficiently sounded and probed during youth. Daniel Defoe

flitted through half a dozen occupations before he turned to literature and wrote Robinson Crusoe. Cowper failed as a lawyer. Grant was farmer, tanner, soldier, statesman. Such wandering experimentation is costly.

We should stretch our child's brain cells with wonder at the marvels of earth, sea and sky; set his imagination tingling with tales of men and women he can emulate; cause his thoughts to wing their way where his senses can not reach; challenge and stimulate him with such a range of act and fact that we can not fail to find something to which he will respond.

In later chapters (Chapters X and XI), we shall study what can be done, in a practical way, and with the usual surroundings of everyday life, to set the mental machinery in motion.

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"We sometimes think that it makes little or no difference what a child is doing as long as he is kept busy. This is surely wrong. He ought at this age to be doing what Nature bids him do, what he does naturally. In other words, we must follow Nature's suggestions, and suit our exercises, whether physical or mental, to the cravings or interests of the child."

JOHN MASON TYLER: Growth and Education.

During our sojourn in this world, we all dwell in a group of little gray cells, set well up in the head. From this vantage point, we view the world and control our bodies. Each of us is, or should be, lord and lofty executor over many humble servants, the lower nerve centers.

For we live in the nervous system; physiology and psychology leave no room to doubt that. And this nervous system, like every good organization, is built up with high and low levels of power and responsibility. In shop, church, store, school, office, we find (1) a head, or "boss" of some kind; (2) subofficials, department heads, who are responsible directly to the chief; (3) toilers, teach-

ers, clerks, those who come into direct contact with the business to be performed and who look to the department head for orders. The head of the concern makes inspection from time to time, and may order improvements here and there. But in so far as he finds his subordinates working efficiently, he lets them alone. He has larger concerns elsewhere.

There are three similar levels of function in the nervous system, as indicated in the cut, though of course these divisions are not so sharply marked in the brain. (1) You, the chief, have your place of business in the higher brain centers; (2) the lower brain centers are your sub-heads; (3) the spinal centers are your humblest workmen.

Higher brain centers	Н	ligh level. Thoughtful, volitional behavior.
Lower brain centers		fid-level. Habit and instinct. Conduct companied by feeling, but little thought.
Spinal centers		ow level. Automatic behavior. No con-
FI		40

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These spinal centers take care of automatic movements, i. e., movements so drilled into us that they "do themselves." Indeed, some of these movements, such as the beating of the heart, are born with us, and are beyond our control. But many are acquired: we learn to wash hands, button clothes, wind watches, lock doors, so easily that we do not even know whether we have gone through the old performance or not. In fact, this is the distinguishing mark of automatic behavior: there is little or no consciousness connected with it.

A story higher are the lower brain centers which concern themselves with habit, and with those "inherited habits," such as self-assertion, sex behavior, play, imitation, going with the gang, and the like, known as instincts. Every practice of such an old habit or instinct is usually accompanied by pleasure, but not marked by thought. The sot drinks, the girl flirts, the boy runs with the crowd, and then there is lamentation because they didn't think. But our saintliest prayers and songs may become just as thoughtless. Who puts into the Lord's Prayer daily, all that reflection can teach him of its mean-

ing? Its repetition becomes almost automatic.

Highest of all, where new paths are being worn in the brain, is the home of the Self. These master cells are the ones that work out our serious decisions, charged with thought. Where to invest money, whom to marry, which occupation to choose, one's place in the world — these are the questions and conducts that make one most keenly aware of himself as a responsible human being. The lower levels of the nervous system and of behavior should all be compelled to minister to these higher things.

We all begin life with a nervous system that is incomplete, unfinished and useless in the upper story. The child is likened to a savage, but he is not even a good savage, at birth. Both his consciousness and his conduct are those of a very inferior animal. We must not blame a child for being thoughtless and irreverent: he lacks the nervous machinery that would enable him to be thoughtful and reverent. The parent's brain must furnish the higher centers for the brain of his child: we must think for our children and direct their conduct until they become

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thoughtful and capable of self-direction. The child's first duty is obedience; the parent's first duty is to be reasonable.

Now, how can we develop in this little cradled animal the high-level centers and all that they stand for? Brains are built as houses are, from the base upward, not from the dome downward. When the nervous system first appeared in the lower animals. it came at the call of the muscles, as a means of effective control. Muscle still puts brain into office. Rob a child of his arms or legs, or of the use of them, and his brain will be lighter and weaker to the end. Education should begin, not with letters, but leas. The baby shows the way, rolling, kicking, reaching, waking up first the big brain centers that control the big muscles of trunk, shoulder and thigh. His natural progress is ever in the direction of the smaller muscles and the higher brain centers that control them. It takes a long course in the university of self-control before he can stretch out two fingers and pick up a button, or say "seventh cavalry brigade."

One of the most dangerous blunders lies in stimulating high-level centers too early. To

begin violin playing or fine sewing or severe book work at age five, will mean, in many cases, to begin training for nervous collapse. The higher brain centers depend on the lower ones to serve as batteries and supply force. If these "batteries" are not first developed, the stimulating of the higher centers is likely to result in sensitiveness, irritation, exhaustion. It is no wonder that illness and the death rate among children increase at six, the age of beginning school. We behave as if childhood were a crime or a disease from which to escape as quickly as possible. Why rush? The little ones will meet maturity and death soon enough. Their chief occupation, though not necessarily their only occupation, through the first eight or ten years, should be muscular play. Of course, this play can be educative. Beginning at about age eight, it can require the accurate use of the smaller muscles, with ever increasing control and co-ordination.

Corresponding, in a rough way, with these three levels of the nervous system, are three types of learning. By learning, we mean, not merely committing things to memory, but gathering experience in such a way as to

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change, and usually improve, our conduct. We may call these types low-level, mid-level and high-level learning.

Low-level learning consists in a blind process of "try, try again" until success comes accidentally. A hungry cat, shut into a box where she can see food outside, claws about until she pushes the lever that opens the door. If she is shut in repeatedly, she learns to shorten the process until she can press the lever immediately. So a child, left to himself, will work out some way, however slow and awkward, of buttoning clothes, lacing shoes, etc. The sixteen-year-old boy learns to shave in *some* fashion, probably not the best. Both should be taught by a higher process, by mid-level learning.

Mid-level learning builds on some deepset, inborn trait, such as the tendency to play, and to imitate, or on an old and strongly fixed habit, as that of walking, or counting. Imitation is so often appealed to that this method is often called imitative learning. Some one who is an artist at buttoning and shaving, should show the little buttoner and the young shaver, slowly and carefully, one step at a time, how to master these important

achievements. This is the universal method for childhood. Used with good sense, and combined with the play spirit, it may be relied on to work wherever anything will.

But with mature children, or those who are very bright, we may well employ the high-level method also, appeal to intelligence, "explain" what is to be learned, bring out the science of it, as well as the art. One can explain to a bright youth, without showing him by example, how to mix lather and hold a razor. For some, this is sufficient. Knowing the science, he will himself work out the art. This is the very method the public school teacher works to death in her effort to have everything thoroughly understood. should teach the art, by imitation, and let the science go, if necessary. If she can not "show" the pupil, by writing, drawing, singing, reading, in his presence, she might as well give her course by correspondence.

In teaching a child to use tools, run errands, brush teeth, comb hair, black shoes, clean nails, tie a necktie, sew, cook, or do anything else, we should:

1. See that our learner has some motive for learning.

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- 2. Decide how much can be accomplished by explaining, how much must be learned by imitation.
- 3. Analyze the task into simple acts and practise each separately until these constituent parts can be joined together as one act. If the motive is lacking, there is hard driving ahead. But when the usefulness and beauty of the accomplishment have been set forth, by word and example, if the learner is not then moved to learn, it is probably best to postpone that kind of lesson, if it can safely be postponed.

For example, suppose we wish to teach the art of brushing teeth. (1) What motive has our child for learning this? We may be able to point out examples of care and of neglect of the teeth, with their results, soundness or decay, toothache, and the like. Or the child may regard the process as a kind of play, liking the taste of the tooth paste, and the foam in his mouth. He will usually imitate his parents willingly if they are faithful in such matters. As a last resort, we can and should fall back on our authority and insist on the brushing.

(2) We decide on mid-level learning,

chiefly by imitation, with little explaining. He is to follow our movements as we brush our teeth or his. The "little explaining" consists in showing him why the brush must move up and down, as well as endwise, to reach the little valleys between the teeth.

(3) We analyze the act (in our own minds), and practise him on each detail separately, if necessary. He learns (a) how to hold the brush firmly, (b) how to apply the paste, (c) how to reach all his white horses, on right and left, inside and outside, so none can feel slighted, (d) how to make both movements, up-and-down, and back-and-forth, in all the four positions, without changing his hold on the brush, (e) how to use his mouth as a pump in the rinsing process, (f) how to dry his brush, and so on, in closing the business. Of course, not all this will be thoroughly learned in one lesson, but it must be mastered some time.

Our progress in any kind of learning depends very largely on how it fits in with the native "set" of the learner's brain. The canary's quick achievements in vocal music must be astonishing to a crow. Yet the crow

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might despise the canary in more practical affairs, such as conducting a campaign against a farmer's corn field. Brain-set may be so favorable, as in the "natural born" student of any subject, that, as Plato put it, learning seems more like remembering old things than acquiring new ones. But it may also be so unfavorable as to make the mastery of a given subject an impossibility. One has eyes that are blind to color, another a brain blind to number.

Frequency, intensity, and recency, indicate the laws by which all special brain paths are worn. As water wears and keeps open a channel in proportion to the frequency of its flow, the strength of its current, and the recency of its passage, so are association channels cleared out in our brains by frequent, intense, and recent passages of nervous current. The perfect performance of the exhibition hour must be purchased by practice oft repeated, concentrated, and recent enough to leave its echoes still reverberating through the nerve cells.

In all kinds of accomplishment, we must recognize the value of "enabling ideas," as they are sometimes called. Mere informa-

tion is not education, but it is very largely the stuff education is made of; just as food is not a body, but very necessary in the making of our bodies. Rob our country of its ideas, the ideas of steam and electricity in the mechanics of civilization, the idea of brotherhood in the converse of daily life, the idea of democracy in government, and we might well pray for missionaries to teach us. Individuals are no less dependent on ideas. Newton was delayed eight years in the working out of his great law because he lacked a correct idea as to the size of the earth. How often do we see one squandering his health, losing his money by foolish investment, forming ill-advised attachments, entering the wrong vocation, because he lacks the information, the ideas that would enable him to steer past all these catastrophes. And the brighter and more enterprising the child, the more "enabling ideas" he needs and can appropriate. They should be brought within his reach and placed at his command by the home-ful, school-ful, library-ful.

But what things shall be learned first? We must ask the child. Among other charms, children have that of variety of

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development. There is no one order of ripening for all. Of course, "asking the child" does not refer to verbal question and answer, but to patient observing and experimenting, as the scientist questions nature to find out her laws. Joseph Henry, having followed a rabbit under the floor of a public library, found access to the shelves through a hole in the floor and thereupon read himself full of fiction and of science. That was the psychological moment for him to begin his reading course! We never know when that moment will arrive, but we must be prepared for it when it comes.

The child lives in one corner of his brain at a time. Now this interest, now that, sways, draws, enthralls, develops some ability or habit, and goes again. Random conduct is the rule, as these brief delights succeed each other. It is a time of legitimate dabbling and tasting: for if an ability is allowed to sleep too long, the time for its best development may be forever past; but if wakened and thrilled into growth, the ripening of it may be achieved in later life. But we must wait on the child's desires: his soulful cravings are a better guide than all our

ardent prescriptions. And in time, when he has occupied all the "corners," his entire brain and his personality will be one harmonious whole.

VI

THE MYSTERY OF PERSONALITY

"With this broad definition of character as those total reactions, or total traits of an individual, I feel sure that nobody need quarrel. In fact, it is exactly what the every-day man means by it. . . . What everybody is anxious about is how the man Jones re-acts inside and out to circumstances. When he presents a 'character' to an employer, for instance, the paper tells what he has done, does now and is likely to do. His employer wants to know . . . how he re-acts to the beginning whistle, to a novel piece of work, or an extra pile of correspondence; whether these give him a headache, or backache, or periods of peevishness, or act as stimuli to tap new sources of energy and make him buckle down to work with extraordinary vigour. Habitual re-actions—fits of temper, blues, frivolity, energy or slothfulness, lying, stealing, cheating, drinking, gambling, courtesy, and a thousand-and-one other so-called expressions of character—are what the great public is interested in and what bring the individual into harmony or into discord with his environment."

ARTHUR HOLMES: The First Law of Character-Making.

WITH most of us, nature can not compete with human nature in arousing interest and drawing attention. You tire of the landscape, but never of your bosom companion at the fireside. Your eyes wander from your book, away from the wonders of sky and sea,

to behold that greater wonder, your child. Here is the top flower of creation. We could easily injure it; but can we understand it, nurture it, bring it to fuller bloom?

Consider your child as he stands before you. You see the form of his body, hear his voice, observe the flash of his eve and the play of his muscles, especially the muscles of hand and face, which so minutely express his mind. You learn that this mind has ways of its own, habits, dispositions, abilities. All these characteristics of body and mind we may call traits. Personality, then, is made of traits. Subtract a trait, say the trait of playing, and you have reduced personality by just that much. Add a trait, that of imitating adults, for instance, or of telling lies, and personality is larger - even if not better than it was before. Each of us is the sum of his traits.

A trait is the way a thing is, or the way it does. Grass is green; it has the trait of greenness. Your horse shies at every unusual sight or sound; he has the trait of skittishness. Your child will not go out alone after nightfall; he may have the trait of fear-of-the-dark. The sum total of all pos-

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sible traits, — stature, weight, color of eyes, hair, skin; strong or weak heart, stomach, lungs; genius, insanity, criminality, egotism, gracefulness, awkwardness, shiftlessness, earnestness, reticence, talkativeness, courage, cowardice, stinginess, liberality, steadfastness, fickleness, sympathy, cruelty — the full tale would run up into the thousands.

Moreover, all these traits may vary independently. Though personality seems far removed from anything mechanical, vet it is much like a machine, any part of which may be very good or very bad, without regard to the nature of the remaining parts. strange way of assembling the component parts of an individual gives us peculiar combinations, personalities that are weak in spots, lop-sided, self-contradictory. murderer sometimes has a strange sense of honor, and has been known to boast that, though he might have killed a man or two, he was at any rate no thief! The soldier, brave on the battle-field, may be afraid to go home by a street that is peaceful but dark. Our spiritual poet is licentious and drunken. The fervent leader of the prayer meeting may cheat his neighbor in a horse trade and

then feel insulted if he is called a hypocrite. The combinations of the traits of human nature are almost past finding out. No doubt most of us die leaving many possible traits undiscovered, even to ourselves.

Because of this independence of traits, we must beware of concluding that one is present because another is. No one who really understands personality would presume to read your inmost nature from the color of your eyes or skin, your height, or the size of your ears. Sane and insane, saints and sinners, wise and otherwise, may be short, tall, blue-eyed, brown-eyed, long-nosed, short-nosed, fat, slim, polished or brusque in manner. Some day there may be a science of reading off the concealed traits from those that are apparent; but that science is for the most part in the future.

Moreover, these traits may change with time or circumstance. Grass is green when it has one kind of nourishment and light, but turns pale or brown under a different sort of treatment. Your child may be saucy to one teacher, who calls out his sauciness, but quite respectful to another, who surrounds him with a different atmosphere. As time

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goes on, the tadpole loses the trait of hav. ing a tail: he becomes a tailless frog. So. too, as time goes on, the incorrigible boy may, of his own nature, become obedient and docile, the harum-scarum may grow thoughtful, staid, and domestic. On the other hand, the liberal young man may display all the ancestral greed when he reaches the age at which it showed in his grandfather. One may develop cataract, as his mother did, at age forty; or remain a model of soberness up to age thirty and then fall into dipsomania, for no good and apparent reason except that his father did it before him. In this respect, our personalities are much like alarm clocks, set to go off when a certain time arrives.

And further, many "general" traits manifest themselves in various particular ways. For example, we can rarely say that a person is unconditionally courageous. He may be courageous in illness, but too cowardly to tell the truth in simple matters. The brave Napoleon feared a cat. So we are seldom proud in every respect; one boasts of his table; another, of his clothes; another, of his charities; another, of his crimes.

All this should teach us the lesson of pa-

tience and tolerance toward our children, of eagerness to make the most of whatever we can discover in them. Without undertaking the impossibility of complete detail, let us see if we can catalog human traits in a way that is simple and practically useful. They may all be included in three divisions, (1) anatomical, (2) physiological, and (3) psychological.

(1) We can often make correct guesses, or inferences, about a person, just as we can about a factory, by the build. In the case of the lower animals, we can read off a great deal from structure; for the mind of such a creature corresponds very closely to its body. The long bill of the crane and the long snout of the pig are unfailing signs of their habits. But we can not be sure that a long-nosed man will do any more nosing around than his short-nosed neighbor. We are too far removed from the animal stage for bodily build to be anything more than suggestive, at least for the present.

(2) We can tell more about a person, as we can about a factory, by watching the processes that go on in it. When we know how well his food digests, how strongly his

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heart beats, how his muscles move, we are getting the key to his make-up. It was Carlyle's dyspepsia that made him the crabbed Carlyle he was.

Physiologists have analyzed the body into systems, digestive, circulatory, muscular, nervous, etc. The *muscular* and the *nervous* system are of special importance, since they bring us into touch with the outside world. The chief business of the other systems is to support these two. Physiologically, a man is his nerves and muscles.

The fool moves himself in great, awkward, club-like masses, often bobbing his whole body as he walks; and his brain probably works by whole lobes, showing no fineness of fiber. The man of mind shows more discrimination and delicate mobility in his behavior, as well as in his thinking. Especially significant are the movements of the more mobile parts of the face, about the mouth and eyes. These little muscles have kept pace, in their evolution, with the finer and higher parts of the brain, and picture personality more minutely than anything else the casual observer can discover.

(3) But back of bodily build and move-

ment lie those mental traits which make up what we regard as the person himself. Some of them, as memory, appetite, love of life, are common to almost all. Others, such as special memory for names and faces, inventiveness, executive power, belong to a limited number. What we are and what we do in the world depends very largely on our special, personal traits. It was the boy Tintoretto, lover of color, dabbler in his father's dye pots, who, though turned out of Titian's studio, persisted in the exercise of his one most characteristic and special trait until his painting rivalled that of Titian himself.

Human nature, like the rock that forms the earth's crust, is laid down in strata. Some traits are so old and invariable as to form the bed rock of practically all natures. The psychologist calls them instincts. They were evoked by the conditions of primitive life, and were so fundamental, and have been repeated in so many generations, that we are surprised when we find one who lacks any of them. Such are self-assertion, the tendency to fight for one's rights, fear in some form, sexual feeling, desire for com-

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panionship, wandering or traveling, collecting or hoarding this or that, playing, imitating, constructing. These are the inward forces, the makers and unmakers of character, which, favored or foiled by what they meet in the environment, either become regulated and settled and serve as a foundation for the higher life, or, remaining unruly and unsatisfied, make the higher life an impossibility.

It is on these ancient, blind and unsubdued forces that teacher and parent must rely largely in their attempts to educate. In particular, the tendencies to play and imitate furnish a reliable means of inducing a child to educate himself. The danger point comes just when these ancient tendencies begin to awake and assert themselves; for they may take the wrong course. Sexual desire, consecrated, sanctifies a home; gone astray, it leads to the debaucheries of the rake and the liber-Self-assertion, the fighting tendency, may make the hero of a great cause, or the petty critic, or the dangerous demagogue. The miser's hoarding trait gets the better of him. The fashion butterfly imitates, in her clothes and simperings, the feeble-minded

ideas of her freakish models. The pleasureseeker plays away his life. All these old traits, from the moment of their appearance, must be discouraged and punished away from an evil expression, and encouraged and rewarded into ways that are good.

But granted that these primitive traits are not eruptive and ruinous, the higher and more variable strata of human nature are those which most distinguish a personality, just as the top layers, rather than the deep rock, do most in making a landscape. Joy in color, delight in music, love of nature, skill with tools, unusual memory for this or that, facility in the use of words, the traits of the trader or business man, passion for books, mechanical or constructive intuition - these and a myriad of other special traits must be noted as soon as there are signs of their appearance, encouraged, and developed to the limit.

Watt, as a boy, wondered long at the force that lifted the cover of the tea-kettle, and later, made this same force run an engine. The young Andersen, at school, told fairy tales about himself. The boy, Händel, whose father wished him to become a lawyer, would

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steal away into a hayloft and practise secretly on an old instrument.

But valuable ability does not always assert itself so persistently. Talent, especially in the timid child, must be coaxed out and cultivated. No parent or teacher can develop out of a child what has not been born in him, any more than the photographer can develop, in a negative, what the light has not impressed there. But the negative must not be permitted to lie in the dark room indefinitely. Both children and negatives must be developed up to their best.

VII

EXPLORING CHILD NATURE

"A man would not get good results by using his cow to draw his carriage and his horse for dairy purposes; yet the difference of adaptability in that case is no more emphatic than the differences in the aptitudes, capacities, powers, and adaptabilities of human beings."

FRANK PARSONS: Choosing a Vocation.

We do not make kites of cast iron, nor sheet anchors of wood. We learn by experience and experiment the characteristic qualities of each substance, solid, liquid, gas, and use it where it will serve best. We do the same with every plant and animal that nature permits us to conserve and control. But our good sense often deserts us when we come to deal with human beings, especially our own children. Darwin's uncle, impressed with the shape of the young man's nose, urged that his request to sail on the Beagle, be granted. But a young man's future should be determined by something

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more significant than the shape of his nose. One of our fundamental faults here, is prejudice. The excellence we see, does not always shine from our child's personality, but beams from our own eyes. We should try, sometimes, to see our little brood as if it had strayed in from a neighboring domicile.

Nor can we bring the matter to a quick conclusion. As it takes years to tell what kind of fruit the tree will bear, so it may take years to identify the human fruitage. It is probably true that the thoroughbred shows his traits more evidently from the beginning, and undergoes less startling changes and contradictory flopping over from one extreme to another. Also, the traits of the thoroughbred will be precisely those of his family line; we can foretell his qualities by knowing his ancestry. Jersey cows never breed Holsteins, nor do born fools ever give birth to a genius. But man, either because of his altruism or his folly, has paid less attention to his own breed than to any other. The result is, that human blood is more mixed and mongrel than any other. Consequently, traits do not show themselves so

readily. Our task of discovery is hard enough, at any rate.

But on our success depends the happiness of our offspring. In reading biography, we so often find the parents insisting on forming the lives of their children according to preconceived parental ideas which the children can not or will not follow, that we come to regard this as almost the normal situation. Yet we never think of insisting that our roses shall be lilies: we do our best to develop them according to their own nature.

How can we find the natures of our children? There is no quick and magic way to open the door of a soul and look in upon it. We must wait till it comes out, study its expressions. One's fitness for a vocation depends chiefly (1) on physique, (2) on general mental and moral qualities, and (3) on special aptitudes and abilities. We shall find it profitable to look for traits of these three kinds.

(1) If we observe a gathering of people engaged in a common vocation, we find no invariable type. In a convention of doctors, farmers, teachers, there are the short, tall, fat, lean, small and active, large and slug-

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gish. Our chief concern with the physical machine, then, is like our concern with the running parts of an automobile. Is there energy enough to do the work contemplated? If either horse power or man power is wanting, we must limit the work to be done, either in quality or amount. Too many children are being urged by teachers and parents to undertake the impossible.

(2) Granted good physique, with reasonable power of endurance, our next concern is with the general mental and moral traits of

our young subject.

One of the first questions is, Whom does he most admire and imitate? Instinctively, we admire those who already possess the trait we are struggling to develop. We respond to that which arouses our potential capacity. We ascribe to a certain book or person some mighty influence that has changed our lives. But the force that wrought the change was in us rather than in the book or the person; the new influence only released it. The student becomes like the teacher whom he most admires, not because of the admiration, but because student and teacher are already alike at heart.

The admiration is a sign of their common qualities, developed in the teacher, developing in the student. So our child, when he imitates, is not so much taking on another nature as he is expressing his own. When Themistocles, as a boy, heard of the honor gained by Miltiades at Marathon, he became very thoughtful, and said the trophy of Miltiades would not let him sleep. When he grew up, it was said of him that "he went beyond all men in the passion for distinction."

Closely allied to this is the persistent seeking for a certain kind of book, picture, companion. Cicero placed before himself the portraits of noble men, that by gazing on their faces he might become like them. What does your child read when left to himself among a roomful of books and periodicals? In these days of copious printing, the whole world goes into type. The library is a world in miniature. If a child likes reading, we can tell, by noting which shelf of the library he seeks, which part of the world and which line of work he would respond to, if he could get at it.

Then there are his successive enthusiasms,

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— marbles, ball, stamps, flowers, mathematics, history, chums, church, money-making, and the rest of the chapters that make up the book of a life. Many of them soon fade, but some stick in his memory and permanently change his behavior. This is significant: for we remember best along the line of our greatest interest and ability. Professor James tells of a student of insect life who "says that he should probably recognize an individual fly, if he had seen him thirty years previous."

It is important to note whether our child is passively thoughtful and dreamy, or charged with emotion and sentiment, or given to action, or whether he combines all of these qualities. These three are the psychological roads that lead respectively toward scholarship and invention, toward artistic appreciation and expression, and toward leadership. Of course there are all grades of attainment. One of intellectual bent may reach the high plane of original and creative thinking, or rest satisfied when he has assimilated the ideas of others. We all begin with imitative thinking; the question is, Where do we end?

So he whose nerves are swept by great waves of feeling may originate Æolian harmonies of delight, or passively worship some master of art, or get no farther than merely being a good fellow and entertaining his friends with stories at the club room.

Perhaps the man of action leads the fullest life, in the sense of exhibiting the greatest number of different traits. For he must both know the world and appreciate its values, especially human values, as found in his fellow men. He is likely to be an "all round" man; but because he is so big all round, he seldom grows tall enough to excel in anything except action. Rarely is he a scholar of any note; rarely does he create anything of moment except, perhaps, new ways of doing things.

Ideals and heroes reveal much. Who would your child be if he could? Even before he realizes it, we can see, expressed in his conduct, the chieftain, the loyal follower, the wiseacre, the prophet, the explorer, the man of mystery. And we should let him alone, provided he does himself no harm, as he grows through stage after stage, until he

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comes into his own. That is just what many of us parents are still doing.

Many other significant mental and social traits can only be suggested here. Has our child courage? Is he kind? Does he scatter or concentrate his energies? How does he spend his leisure time? his money? Is he self-reliant? reckless? Will he make sacrifices for his own future good? Is he tolerant with others? good at team work, or inclined to "pull out?" Is he tactful or blundering? In what is he regarded as a leader by his playmates or workmates? What can he best organize and carry through?

(3) In considering special abilities, it is well to observe whether there are any that run in the family. The glory of Venetian art arose through one family chiefly, the Bellini. Three generations of the Bowles family have built up the Springfield Republican, as the Walters family made the London Times. Genealogy is full of families of statesmen, engineers, military leaders, actors, preachers,

and so on through the list.

We may discover much by inquiring which, among the many interests that dawn and fade in the childish mind, have proved per-

manent and have come to distinguish him from his companions by his love for this or that and his proficiency in it. Comstock ran away from school to seek the company of the insects, and remained their lifelong friend and biographer. The little artist will not for long forsake his colors, nor the musician his notes. We make a momentous discovery when we find, woven in among all a child's activities, the golden thread of his life interest.

We must give every opportunity for traits to express themselves, and watch minutely for their appearance. In sport, in travel, in reading, in conversation, in every occupation, the talent may come to light. It is ours to recognize and develop it.

But the final step belongs to the child himself as he becomes a youth, and then a man. We should not only abandon the purpose to guide him according to our preformed plans, but we should grant him an ever increasing power of choice. He should learn to choose, reject and select many of his courses in school and his occupations outside of school. When he has gained a sufficient amount of

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self-understanding and self-control, he must choose his own vocation. He must learn to box the compass of his own nature, and sail off into the deep alone.

VIII

FOLLOWING THE WAY OF FREEDOM

"The best way to avoid undesirable uniformity in schools is to push steadily toward the individualization of instruction by reducing the number of pupils assigned to one teacher. The larger the number of pupils assigned to one teacher, the greater the inevitable uniformity of method and pace, and the smaller the account that can be taken of individual peculiarities, good or bad. . . To the individualization of instruction will be added, in time, the careful study of each pupil's temperament, constitution, and mental aptitudes and defects. . . "

CHARLES WILLIAM ELIOT: Educational Reform.

When the chemist wants to find the properties, the *traits*, of some substance, such as sugar, he observes what it does under different conditions. He places it over fire to see if it will explode or melt, and in water to find whether it dissolves. He brings it into contact with other chemicals and sees how they behave together. He finds that, by a certain process, he can change brown, ungranulated sugar, making it white and granulated. This changing and developing of traits con-

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stitutes what we may call the "education" of the sugar. We may not grant it a diploma, but we have perfected it according to its nature and made it socially useful; and that is the essence of education.

The farmer does the same with his plants. He learns their traits; that buckwheat will bear frost but corn will not; that on the very same soil, beans may flourish and potatoes languish. So he educates each crop till it is ready to graduate at harvest time. He develops the traits of each plant according to its nature, making it as useful as possible to humanity.

The animal trainer proceeds similarly. He subjects the monkey, horse, or dog, to various tests, tries him out under different conditions, and then proceeds to educate on the basis of native traits. One monkey is found to be fit for the trick ring. Another is limited, by nature, to a position more humble and obscure. One horse is fit for the plow, another for the coach, another for the racing sulky. The traits of each must be developed, according to his nature, until he can graduate into the position of greatest social usefulness.

The chemical seems to be an assemblage of elemental forces. We never accuse it of having a will of its own. Yet, if it could talk, it would no doubt declare that it "wanted" to do what it did do: the sugar felt like melting when courted by the water; the gunpowder can explain why it commits suicide under the torture of the spark. At any rate, chemical, plant, and animal, all behave in an orderly way, and differently under different conditions.

The case of the child is more complex, but similar. His heart beats, his brain thinks, his muscles react, all in an orderly way, according to law, and differently under different conditions. We must learn to think of a human being as a kind of natural force that fits in and behaves well in some situations, but works ruin in others. One horse runs away at sight of an automobile; another does not even move an ear. One man, under provocation, strikes or shoots; another smiles. We must develop the traits of each, and then place him where we want that kind of force to act. Such a process would constitute ideal education.

If we ask the botanist to describe ideal

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cultivation, he will inquire, For what plant? Sometimes, we bring in the woodland flower and attempt to grow it under what we regard as ideal conditions in our garden; but such flowers often die. So parents carelessly transplant their children from home to college or from country to city, only to find that the traits required in the new environment are lacking. We should be more practical.

The animal trainer has found the truth of the proverb, "A whip for the horse, a bridle for the ass, and a rod for the fool's back." Even if he does not agree with the specific kind of education recommended, he knows that each of these animals requires different treatment.

Our attitude toward our children is incomprehensible. For while we insist that they have a much more individual and sacred self-hood than any lower creature, we often subject them to much more mechanical and undiscriminating treatment than the animal fancier gives to his pets. We educators, with our eyes on an ideal which requires so many units of this and of that, proceed to make up our mixture of units before we know how nature has made up the children. This is

patent-medicine education: all must take the same dose, whatever the effect. We undertake to tell you how many sections of the course of study your child should have mastered in four hundred weeks of fifteen hundred minutes each, but may have no idea of what this child will be good for, in a practical way, when his school days are over.

Even the best friends of the school recognize that it is a great machine for the mechanical handling of multitudes, that too often it stamps its whole product alike, and yields nothing better than a machine-made education.

As G. Stanley Hall expresses it: "We are conquering nature, achieving a magnificent material civilization, leading the world in the applications though not in the creation of science, coming to lead in energy and intense industrial and other activities; our vast and complex business organization that has long since outgrown the comprehension of professional economists, absorbs ever more and earlier the best talent and muscle of youth and now dominates health, time, society, politics, and law-giving, and sets new and ever more pervading fashions in manners, morals,

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education, and religion; but we are progressively forgetting that for the complete apprenticeship to life, youth needs repose, leisure, art, legends, romance, idealization, and in a word humanism, if it is to enter the kingdom of man well equipped for man's highest work in the world. In education our very kindergartens, which outnumber those of any other land, by dogma and hypersophistication tend to exterminate the naive that is the glory of childhood. Everywhere the mechanical and formal triumph over content and substance, the letter over the spirit. the intellect over morals, lesson setting and hearing over real teaching, the technical over the essential, information over education, marks over edification, and method over matter." *

Our purpose here is not to indict the school: it is doing an indispensable work, and is well worthy of our support. But we teachers would better speak frankly with our patrons, warning those who have a blind faith in us that we are still far from our ideal, and that the average school is as yet a very imperfect educational instrument.

* Adolescence, I, xvi, xvii.

The remedy lies in the direction of greater individualization. The expert fruit grower does not allow his apples to crowd each other. He sees to it that each has sunshine, air, room to assert itself. This is just what the children need. Surely, when growing apples receive individual attention, we can afford, for our children, an education that is personally supervised and hand-made. We should support this in the school and supplement it by our own efforts at home.

In the education of great men, schooling of the traditional kind seems to be largely an accident: they develop either with it or without it. The essential fact about them all is, that they are true to their talent and persist in expressing themselves in their own way. The world calls to them with a myriad voices, but they are deaf to all but one, the one to which the soul throbs. Embarrassed sometimes by poverty, sometimes by wealth, apparently hemmed in by circumstance, still the most conspicuous fact about them is that they are free.

They are free because they pursue what they will, in spite of all. So Miller refuses to go to college to learn to be a minister, pre-

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ferring to learn geology in a stone quarry. Leibnitz, at age six, is turned loose in the family library, goes to the university at age fifteen, and soon publishes books. Lincoln never sees the university, but educates himself by the way. Christ's "uneducated" disciples are still educating the world.

Most of our children are not geniuses. If they are to reach their best, we must give to them what the genius demands for himself and forces from the world, freedom for selfdevelopment. The child must have a chance to show what kind of working force he is. As a stream of influence, he must cut his own channel to the sea. All our early forcing is only so much scattering and dissipating of energy if we force in the wrong direction. The child is indeed like a stream: the elements of his being gather from many sources; his first apparent course may be in direct contradiction to all his later development. There may be much meandering and back-flowing. But sooner or later there is a gathering and massing of energies which sways him and determines the trend of his future. His fundamental need is freedom for self-expression.

Added to this, is the fact that the child lacks self-knowledge, and must find himself out, as all other mysterious things are found out, by experiment. He must feel his way. Just as, when a babe, he knew his mother by her voice before he could recognize her by sight, so he hears his "call" vaguely before he can "see" what he ought to do. He feels drawn to a certain kind of work before he can give good reasons why he should do it, just as, later on, he will fall in love with his future wife before he can work out the logic of it all.

It is for this reason that the self-made man so often outstrips his school-made competitor. The school should be a kind of laboratory in which the child can experiment and learn what kind of ability and personality nature has fitted him with. But instead, it often refuses him the least license to explore the recesses of his soul in this way. The self-made man, on the other hand, is having his bouts with the world, finding the danger points, and learning as much by his failures as by his successes. It is for this reason, too, that the "dunce" so often stands high in later life: the school did not

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offer a challenge broad enough to include his special kind of ability and develop his most precious traits.

This helps us to understand why so many children leave school: they have energies, pushing for expression, which the school neglects or obstructs. They can not stand an education that is ready-made, and to somebody else's measure. They need a greater range of reading, more kinds of play and occupation, more freedom to pry into things, to satisfy their natural curiosity, to build, construct, execute, to do just what they naturally do in a good home, following good leadership.

There is, then, no one curriculum for all. The little "race course" (for that is what curriculum means) must become a broad field where each can explore according to his interests. Gradually, he will come to understand the world, or at least his chosen part of it, and himself as a working force that fits somewhere or other. We found that the chemical, the plant, the animal, are all "educated" by developing each, according to its nature, so as to make it most useful. And this is true of the child. We must discover

what man power he has, and give it freedom to work where it will work most efficiently.

Do not be disappointed if there is much trial and error. Your boy will be a preacher to-day, a business man next month, and settle down at length as plumber or school teacher. Many a good man goes on experimenting into mature life. Albert Duerer, Germany's greatest painter, spent vain years of study on the goldsmith's art before his father allowed him to take up painting. Goldsmith was graduated as "Wooden Spoon," the college term for dunce, and failed in his effort to be a physician, but turned to literature and found fame.

Parents and teachers must help to make this experimenting as systematic, thorough, economical and quickly conclusive as possible. The method of trial and error is too costly to be prolonged.

Let us sum up our conclusions: -

- 1. Each child is a unique body of traits.
- 2. To bring out these traits, the child must have a wide range of experience.
- 3. The best education is secured by permitting the child sufficient freedom to follow his most significant traits. This freedom, under

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reasonable authority, should characterize both home and school.

4. Every young person should have the privilege of experimenting at length with himself, and of failing repeatedly. But one success, at length, is sufficient.

IX

CHILD CULTURE AT HOME

"Caesar once, seeing some wealthy strangers at Rome, carrying up and down with them in their arms and bosoms young puppy-dogs and monkeys, embracing and making much of them, took occasion not unnaturally to ask whether the women in their country were not used to bear children; by that prince-like reprimand gravely reflecting upon persons who spend and lavish upon brute beasts that affection and kindness which nature has implanted in us to be bestowed on those of our own kind."

PLUTARCH: Life of Pericles.

We have now considered the constitution of child nature and how to study it, how to discover traits and how to develop them. We have found that each child is a new problem, and that he cannot be solved in advance by the most learned psychology or child study, or the most ambitious parental determination. But through all his developing years, we must help him to solve himself. Our question now is, What can we actually and practically do at home to aid in this solution?

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1. First of all, we can see that our so-called home is a home. If we could count the number of houses in any town, and then count the homes, the difference between the two totals would often be a sad reminder of what remains to be done for the children.

The home environment is the most stable influence in the child's career, and is the one thing that should be attended to at all costs. Teachers come and go: we have all had many of them; but parents are so precious that Nature can afford but two for each of us, and these must do for life. So the school and its work fail to stamp themselves on us as home and vacation do. An investigation of children's imagery shows that "practically all the imagery with which children ordinarily do their thinking has been acquired elsewhere than at school. In fact, the real season of education seems to be during the holidays. All the school does is to organize and systematize those outdoor experiences." * But certainly, both the indoor and the outdoor experiences at home exert a lasting influence — the home songs and proverbs,

^{*}Robert R. Rusk: Introduction to Experimental Education, p. 111.

home wisdom, ways of speech, of dress and of work, the home love or lack of it, the home ideal. The book that influenced you most was not the one you so elegantly intoned into the ears of your classmates at school, but the one you silently drank in as you sat in your favorite nook in the library, or under the friendly tree, at home.

At home, heredity and environment reenforce each other as nowhere else. Francis Galton puts it: "Those teachings that conform to the natural aptitudes of the child leave much more enduring marks than others. Now both the teachings and the natural aptitudes of the child are usually derived from its parents. They are able to understand the ways of one another more intimately than is possible to persons not of the same blood, and the child instinctively assimilates the habits and ways of thought of its parents. Its disposition is 'educated' by them, in the true sense of the word: that is to say, it is evoked, not formed by them. " *

"My son, you eat like a pig," said a father, in reproof. Then, to drive the lesson

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home, he asked, "Do you know what a pig is?" "Yes," said the son, "a pig is an old hog's little boy!" We expect pigs to take on the ways of their swinish elders, for they are born pigs and they live among pigs. Human beings can not wholly escape the same law.

We must reverse the tendency to turn the best side of our nature out toward the world and the worst side in toward the home. Home must not be merely "a place of abode," as the dictionary defines it, but a real life center, with sunshine enough to open all the buds of a child's being. It must be a social center, rich with family love and true companionship; a work center, with abundance of occupational and constructive activity; a play center, with plenty of play-stuff and play spirit; an æsthetic center, with beauty in its furnishings and its behavior; an intellectual center, shielded from the world but teaching by voice and book what kind of world this is; a love center, daily making happy memories that will gladden life to its close.

2. In addition to the home spirit, we should have home equipment. If everything that

enters our homes were admitted and paid for on the strict basis of its home-building capacity, how differently our houses would appear. We could easily dispense with the mahogany furniture and cut glass which we purchased to gratify our vanity, and for our neighbors to admire when they call. If our neighbors have good sense, they will think little of our fine furniture and rich wardrobe and luxurious larder, but gaze with lingering look on the furnishings of our minds. They will remember, too, that the nursery is more important than the parlor.

The home and its surroundings must furnish sufficient equipment and activities to charge the child's mind with images to be used in thinking and imagining. Just what does the Lord's Prayer or the song, America, mean to a child? Only so much as his experience enables him to put into it. Stevenson tells us how he, as a child, interpreted the psalm beginning, "The Lord is my Shepherd: ""The 'pastures green' were represented by a certain suburban stubble field, where I had once walked with my nurse, under an autumnal sunset. . . . Here in the fleecy person of a sheep, I seemed to

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myself to follow something unseen, unrealised, and yet benignant; and close by the sheep in which I was incarnated—as if for greater security—rustled the skirts of my nurse. 'Death's dark vale' was a certain archway in the Warriston Cemetery.... Here I beheld myself... utterly alone in that uncanny passage; on the one side of me a rude knobby, shepherd's staff, such as cheers the heart of a cockney tourist, on the other a rod like a billiard cue, appeared to accompany my progress; the staff sturdily upright, the billiard cue inclined confidentially, like one whispering, towards my ear."

The little university of the home, if it is to give experience enough to enrich life with meaning, should have at least four departments, a garden, a kitchen, a shop, and a library.

In the garden, Nature teaches. Here is granted the luxury of good dirt, and a vision of how it "climbs to a soul in grass and flowers." The humblest vegetable tells us how all men must draw their living from the soil, and what would happen if all plant life vanished. Twice blessed is the child of the

city who can have, after his garden, a graduate course on grandfather's farm. Investigation shows that many children enter school with such a slight knowledge of the environment as to make one wonder where they could have spent their early years. On the farm, they can repeat the experience of Adam, name all the animals, see their first real sunset, eat of all the trees of the garden, and feel sad when they have to leave this Eden.

The kitchen, we have found, is a wonderful museum of toys. It is a marvelous educator in other respects as well. Here are domestic science and art that are really domestic. The stream of energy that sustains the home, flows in through the kitchen. Here start physiology, hygiene, chemistry, and many another science besides cookery. The very word economics takes us back to a Greek kitchen, and bids us teach our children early to consider the cost of living, and to compute the relation between the kitchen and the bank account. From here it is a short step to politics, to the lesson that the race is but one big family which ought to make the most of the family resources; and that the grafter, the

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waster, the luxury-lover, is the robber and enemy of us all.

The shop, however inexpensively outfitted, is an extension of the industrial department of the home. Work should come to be considered a matter of course. Labor does not have to prove its dignity: it is the tramps and other gentlemen of leisure who should be compelled to demonstrate that there can be such a thing as dignity without labor.

It is not necessary that our little home work room become a machine shop or a fully equipped manual training room. But the poorest can afford a bit of space where mother and daughter can sew together, where father and son can whittle and glue and drive nails and screws, where clay or sand or a mixture of flour and salt can be molded, where ingenious structures of all sorts can be wrought.

The library is the brain of the home, as garden, kitchen and shop are its hands. It is the center of intelligence, binding together and unifying all other departments as the nervous system connects and unifies all the separate parts of the body. Kitchen and shop deal with the *now* and *here*. Their in-

terests are of to-day, and close at hand. The library is a mental telescope, enlarging the child's vision both in time and space. All history draws near, and distant lands become as next-door neighbors. The brighter the child, the more he will appreciate all this.

Nor is it enough to have access to the public library, any more than it is enough to dine at the hotel occasionally. One can not run to the grocery store whenever he is hungry for food, nor to the public library whenever he is hungry for books. We must have a stock at home. Here our child should find an abundance of facts of all kinds to supplement and aid his own keen observations and make him alive to his environment; literature to stimulate his imagination and chasten his passions; biography to provoke him to emulate his hero - there is no greater challenge to youth; suggestions for play and happy occupation: for children must be taught how to spend leisure out of mischief and immorality, as well as how to work. Whatever the direction of our child's interest, his books should yield him food for it. Few of us can travel over the world, and none can travel into the past. But the home li-

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brary can be a microcosm, a little world. And he who finds his chosen place in it will have gone far toward finding his fittest place in the larger world.

It will be observed that the home equipment recommended is very modest, simple, inexpensive, and in a sense, old-fashioned. It includes none of the apparatus distinctive of any cult or school; for such apparatus is usually expensive and quite as usually unnecessary to sound education. If shop and library require some of the money with which we should otherwise indulge ourselves or deck our children's bodies, let us remember that mental being is better than material having: that William Penn was quite right when he said it is not so much what we leave our children, but how we leave them; and that one hundred dollars spent now to purchase an annuity in the form of an education. is better than a thousand dollar legacy left to ignorant offspring.

3. A third thing we can do for our children is to give them leave to grow up in their own way. Having furnished our roses the best possible soil and atmosphere, we wisely leave the rest to them and *let* them grow. And we

must not take too much thought about adding a cubit to our children's stature, especially their mental stature. Our neighbor's child appears on the public platform, and speaks a foreign language at age three. But that is no reason for concluding that the Good Maker of children intended our little one to do the same. We are too quick to apply the epithet "retarded" to those who find it hard to perform certain tricks in school. Jacob Riis and one other boy in his school distinguished themselves for backwardness and misconduct. When they left the school, their classmates were glad to get rid of them. But years later, when the class reassembled, these two "black sheep" were the only ones who had received the king's ribbon for distinguished service.

There is no harm in teaching a child to read at two or three years of age if he shows a strong liking for the process. There is no harm in delaying this part of his education till he is eight or ten, if that is more in harmony with his constitution. But the growing years are critical years, and we should do too little rather than too much. The studious child must be protected from the

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stimulus of competition in school, instead of finding it reenforced and intensified by his parents.

One great reason why it is necessary to proceed with caution, is that we can not fore-tell the course of development of any particular child. In the average six-year-old, the heart is weak and undeveloped as compared with the other organs; at eight, we expect a marked increase of energy and an even more marked susceptibility to fatigue; somewhere between the ages nine and eleven, there is a slowing down of growth, after which the girl, responding sooner than her brother to the increased energy that accompanies sexual ripening, develops ahead of him, physically and mentally, for three or four years.

But statistical results like these can not be applied safely to an individual. If you know what the average rainfall per day is in your locality, that does not enable you to foretell how much it will rain to-morrow. We must patiently study each new human specimen. His developing organs, and especially his developing brain centers, as evidenced by his interest in this or that part of the represen-

tative environment we have described, are the most trustworthy guide we can follow.

It must not be supposed, from the emphasis laid on liberty, that every whim is to be humored. The tree must be pruned, perhaps tied to a stake for a time. Every interest, as soon as it has shown itself to be of importance, should be systematized. When the time comes to read, or use tools, or care for pets, let us have regular attendance on these matters, even though the task becomes grievous sometimes. Liberty, here as everywhere, means liberty under law, the law of growth.

4. Finally, we must live with our children, and let them live with us. All too soon they will graduate from our arms and our homes. See to it that many happy memories are established before that day.

Too often, when our child wants to "help" us, or wants us to help him, he is regarded as a mere disturber, a waster of time. But he is worth the expenditure. It is a real danger point when we regard our children as nuisances or they regard us as such. We should be glad of the chance to relive our childhood with them, and to perfect it by letting all the old family faults die.

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If we fail to do so, we lose the strongest moral grip that a parent can get on his child's future, the warm respect and affection that grow out of mutual understanding and close companionship. Gradually, he will follow those who acquire most influence over him. Let us be the influential elder companions.

If it is the child's duty to follow us as guides, it is our duty to answer all his questions!

"Bob-o-link, tell me, tell me true,
How does the clover grow?
Where do the daisies find their frills?
What makes the ocean waves go?
Where does the rainbow start and end?
What makes the sky so blue?
Tell me the reasons, my little friend,
Bob-o-link, answer me, true!"

We often regard these questions as vagrant and meaningless, but usually they are not. A two-year-old was accustomed to ask his parents to repeat many of their sentences over and over. They complied, but tried to discover what there was about these sentences that made them so attractive. Each was found to contain some new word that

excited the boy's speech center, and a day or so afterward this new word usually appeared in his own babblings. So, the hours we spend reading to children the dear old story or the thrilling new one, are never lost. So long as your child will listen, you may be sure he profits by what you read.

By such companionship and intercourse, we can give our children what may prove to be the most valuable part of their education. Many an act of skill they will acquire from the parent, if he or she is skilful. We should not leave them to learn by the costly method of trial and error, but proceed by the quicker method of imitation. A six-year-old found the handle of his hand-car loose. He located the trouble, found a nut of the right size to replace the lost one, refused his father's offer to make the repair, and proceeded to make it himself. The father, seeing that the boy held the pliers awkwardly, showed him the better way, which he eagerly adopted. Then, at his elder's suggestion, he battered the bolt so that such a mishap could not be repeated. This father regards such episodes as a very real part of his boy's education.

So in the garden, kitchen, shop, and li-

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brary, we can aid and supplement the work of the school. The school is often narrow in its appeal. It must feed large numbers, and so is likely to have a limited range of diet. It will develop what we may call the mass traits; but the personal and special abilities which we have found to be so precious, can best be sought out and drawn out by one who shares the life and the ideals of the child.

"The father so absorbed in business that he has no time to devote to the training of his children, and the mother so occupied with housekeeping and social duties that she does not attempt to know where her children are or what they are doing—these are guilty of parental neglect in worse degree than the mother who must leave her children to earn a livelihood. . . . In the most impressionable period of life, at a time when careful parents would provide safe occupation and amusement for their children, careless parents let them run loose."

HANNAH KENT SCHOFF: The Wayward Child.

PERHAPS the Busy Parent, indulgent so far, now objects: "All this is very well as an arm-chair vision, but two or three children crying about my feet as I cook or clean, make an eloquent demand for something immediate and very practical." Granted.

But at any rate, you are not one of those who regard their children as little matrimonial obstructions, troubles thrust upon them without pre-arrangement, burdens to be escaped by any device. If you were, you

would have left this book unopened. Whatever else you do, you will never follow the plan of the little old lady in the cramped quarters of the shoe:

"She gave them some broth without any bread,
She whipped them all soundly and sent them to
bed."

If you were asked to tell what impediments lie in the way of giving your children a home-made education, you would no doubt find them all falling under three general heads:—1. You lack the time. 2. Educational material and a course of study are wanting. 3. Perhaps you are unskilled as a teacher. Let us deal with each in order.

1. You are "too busy." This is a universal cry. You will find your child's teacher busy, too—too busy running her educational engine to put the personal touch on each product. Home and school stand at opposite ends of the street: if the child slips from their grasp, it is the street into which he falls, and the street is never "too busy." Our children spend twice as much time at home as they do at school: shall we waste

two-thirds of their capital? As the physician expects you to care for your health at home, so the school expects your co-operation, at least. If it is generally true that home is so distressingly busy, then we must construct a new kind of home.

But are we really as busy as we think? Many of us are wasting our time at hard work, not leaders of the simple life, but followers of a complex system of household slavery. We should neglect anything else rather than our children. Cobwebs in the corners are not half so dangerous as cobwebs in the brain. Dirt, with all its germs, has never caused so much injury as dirty consciences and tainted ideals. Sweep and garnish the mind first.

Finally, it is a rather fortunate predicament if you must attend to other duties while you guide your child's activities. Good education demands the developing of a sense of responsibility in the pupil. It is well if you, like the teacher, must leave the child to work his own way sometimes, instead of guiding his every step of learning. After all, he must walk alone some day.

Nevertheless, the problem of the busy

parent is a real one. The following suggestions may help to solve it.

- (a) Make the best use of all the time you do spend with your children, meal time, bed time, bath time, the occasional stroll together, and the evening hour. With many children, every hour is story hour. Read a story from some good collection if you are too tired to tell it. Talk of the lessons at school; and if you have forgotten them, let your child learn by teaching them to you again. Make the meal hour something more than a time to bolt food, tease each other, and throw out interjections about last night's moving picture. Let it mean rest, peace, and a delightful concourse of ideas. The children will not "behave so" if you respect them as you wish them to respect you, and if you keep in mind the first rule of conversation, that every topic introduced shall be of interest to all present.
- (b) When the children must be left to themselves, provide the best possible substitute for your presence. The reason why we have text-books in school is because the teacher can not divide herself up, stand constantly at each child's elbow, and accompany

him home at night. So you can leave, to represent you in your absence, books,* games, developmental occupations of all sorts, as an educational extension of your personality.

- (c) Make your burden support you by teaching the older children to instruct the younger. Playmates, too, should be selected with great care, for children learn much from each other. This is a happy way of playing school, and the attempt to pass knowledge along without having it punctured by the questions of the learner, will strengthen its tissues admirably.
- 2. Our second impediment to home education, which is, that at home we lack material and a course of procedure, suggests the story of the sailors who hailed a passing ship for fresh water, only to find that they were themselves in the midst of great currents of it. How glad would many of our teachers be to have your equipment, your measures and scales and range from the kitchen, your back

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^{*} Probably the nearest approach to an automatic education is the "Book of Knowledge," published by the Grolier Society, New York City. It furnishes a wealth of choice reading, pictures, games and occupations for children of all ages.

lot, your pets, your yarns, threads, cloths, sewing machine, your wealth of objects to draw and paint, your numerous occupations. You can not point to an object nor an incident at home that does not radiate its educational waves. Whence the gas which lights or cooks for you? What makes the water boil? Why cook food? Why not fry it all? How does the sweeper work? Why does the window stay set at any height? Where did the canary come from? What is the source of milk and butter? Many a child is wofully handicapped at school just because he has not been brought into live and thrilling contact with these simple, surprising things around home.

As to a home course of study, it is hardly necessary. The time to teach a thing is when comes the psychological moment at which the pupil is ready to learn it. Besides, most children are in school at an early age, and their general line of advancement is determined. Indeed, home work finds one of its largest values as a supplement to school work. At home, there is greater freedom, a chance to make blunders without embarrassment, a chance to find out something

really new to report to one's classmates—no small honor. At school, all can take in, get impressions, together, and rapidly; but individual expression, which is just as important, is slow and costly in time. Home furnishes opportunity for it, clarifies learning, suggests new problems; and the more a child fishes with interrogation hooks, the larger his catch. At school, knowledge is given out like army rations, so many grams of each kind every day; at home, one can follow his vocational bent,—a sacred privilege, as we have seen.

3. Do parents lack understanding of the child's mind and of the teaching process? This book is written to help correct that very lack. But parents must teach, willy or nilly. Your child's character is in your hands. It is you, chiefly, who will teach him his morals. Arts there are, too, such as speaking the mother tongue, wherein your teaching will hold in spite of all. If you are competent in such momentous matters as these, your good sense is a safe guide in lesser things. Live sympathetically with your children and you will learn more pedogogy than ever entered a book. Most of your child's teachers have

never had such a golden opportunity as yours.

We can get much practical knowledge, of a kind very serviceable in teaching, by observing how we ourselves learn. Let us suppose that our training in botany has been meager, and we determine to become more intimate with the flowers. We are likely to use all those mental powers which we studied in a previous chapter (Chapter IV), and in about the order in which we studied them.

We begin by observing, or, as we should say in psychological language, perceiving, violet, buttercup, moss pink, cowslip, globe flower, ladies' tresses. We learn to discriminate, to tell similar species apart, and, within the same flower, to note differences between calyx and corolla, stamen and pistil. Having stored our minds with a wealth of floral experiences, we are able, with the aid of a good memory, to continue without the actual flowers in our presence. We read of flowers in far away lands, and imagination pictures them for us. We may amuse ourselves by imagining strange, new flowers of all sorts. Perhaps we proceed to something

still more difficult, real thinking; we try to work out the laws of plant life and growth.

It is this very array of abilities that we should develop in our children, Observation, Discrimination, Memory, Imagination, Thought. To this problem we shall now turn.

As a preliminary to exercises in observation, it is well to see that our little folks have efficient organs to observe with. The boyhood life of Charles William Eliot and Theodore Roosevelt, both of whom suffered long from defective eyesight, shows what may occur even in the families of the most wellmeaning parents. Pay careful heed to the school report cards that tell of defective vision, dull ears, imperfect teeth, adenoids or other evil. You can yourself tell, in a practical way, whether your child can read ordinary print with each eye separately, held a foot from his face, and follow directions given in a low speaking tone from a distance of twenty feet behind him, first one ear and then the other being covered by his hand. But if there is trouble of any kind, or the suspicion of it, let your physician pass his opinion.

"There is nothing in the mind that is not first in the senses," says Comenius. No one has ever seen a painter who was blind from birth, nor a musician who was congenitally deaf. If our children are ever to remember well, imagine well, think well, they must first perceive well. There is abundance of material everywhere, and perceptive exercises are not difficult to devise.

The first sense to develop is touch, including movement sensations. These come into play even before birth. But nose and mouth are ready to receive smells and tastes at birth, and hearing begins within a few hours, or at most a few days. Sight, the most useful sense, develops most slowly: while there is sensitivity to light at birth, and even before, the balls of the two eyes, as well as their lids, do not move normally together during the first two or three months. At about the time when the two eyes learn to "pull together," and look at the same object at once, usually during the fourth month, we get the first real perception of an object as such. However, two years or more may elapse before distance can be estimated, even approximately, by the eye. Ability to see

color begins at about the seventh month and continues its development for years. Most children, under the age of six months, see no colors, but have a sort of camera vision which includes black, white and gray only.

Nothing (except danger of disaster) is gained by coaxing any power out too early. It is like stimulating the sex instinct to assert itself before the due time. The greatest wisdom lies in waiting till nature's hour strikes, and then working according to her dictates.

Since touch and the muscular sense are first to develop, and among the first in importance, the essential thing about toys is that they have some "go" to them. If they also send out a noise or a tone to salute the ear and flash one or more colors for the eye, so much gained. Of course, simple toys only can be used at first, but there is no objection to complex ones as soon as baby's brain and muscles become complex enough to control them successfully. What is my lady's automobile to her, when she drives it for pleasure, but a complex toy? When colors are furnished, we must always guard against poisoning. Fortunately, sounds, touches

and movements are not so likely to be sucked off and swallowed!

All the colors can be represented by colored balls. The number of colors is not fixed: Isaac Newton thought there should be as many colors as there are notes in the musical scale, and so made the number seven, which has become traditional. Psychologically, the most necessary colors are red, green, yellow and blue; and although black and white are not colors, strictly speaking, a black ball and a white one may well be added. When these balls are not being thrown or rolled about, it is a good plan to suspend them by strings from some part of the crib, so baby can play with them at pleasure. Yarns are good, samples of cloth, toy balloons, paints at the proper time, cravons, and the rainbow on the table cloth when the sun shines through some prismatic glass. See that the name is heard when its color is present, for in this way do we learn all our friends.

Training in the making of pleasing color combinations can be given by taking the little ones into conversational confidence when you are planning their clothing or your own; or

selecting curtains, wall paper, dishes; or enjoying pictures or landscapes. Nature provides colors enough if we would but see them. But most children need an interpreter to give them artistic vision.

The best stimulus to hearing and speech for no child will talk if he does not hear language — is a sweet human voice. and sing to baby as you go about your work. Bells of sweet tone furnish a musical stimulus, and an instrument of the "metallophone "type may be used to enable the little one to hammer out all the notes himself. A tumbler, successively tapped as you fill it with water, throws out a mellifluous scale. There should be harmony of sound as well as of color. One may almost say each home has its own sound-scheme as well as its colorscheme. The lowly mouth-organ and the music-box are not to be despised, and æolian harps and Japanese wind-bells are full of aural delights. A good game may be devised by striking combinations of keys on the piano and asking the child to tell whether the tones like each other or whether he can hear them fighting and beating one another inside.

Perception can be much improved in

speed, range and accuracy by suitable training, training such as we can give our children incidentally in our walks and talks together. Houdin's account of the exercises he gave his son has become classic: "My son and I passed rapidly before a toy-shop, or any other displaying a variety of wares, and cast an attentive glance upon it. A few steps farther on we drew paper and pencil from our pockets, and tried which could describe the greater number of objects seen in passing. I must own that my son reached a perfection far greater than mine, for he could often write down forty objects seen in passing, while I could scarce reach thirty. Often feeling vexed at this defeat, I would return to the shop and verify his statement, but he rarely made a mistake." *

Questions and conversation not only stimulate the child's perceptive powers, but enable us to know how he is interpreting his world. The following from Professor Judd illustrates this: "I remember when I was a little boy riding across a high railroad bridge with my father. Down on the flat land at the river level were some laborers.

* Robert-Houdin, in "Second Sight."

I was much interested in them, they were such little men. I could have held one of them in my hand. I decided to share my delight with my father, and induced him to look out and see my pygmies. Like all children, I believed, of course, in the infallibility of my father and of my own eyes. My beliefs received something of a shock that day when he told me that my pygmies were just ordinary men, and turned back to his read-

ing. . . .

"Years after, I was a party to a similar comparison of adult and child experience; this time, however, I was the adult. We were riding along together, and looking out over the broad pasture land, a little girl of six and I, when we saw some horses grazing quietly a quarter of a mile or so away. There was no difficulty in recognizing the horses as animals of full, ordinary size. And I was surprised into looking a second and even a third time by the little girl's cries of joy at seeing 'those colts,' as she insisted on calling them. Finally, I realized that the horses were to her untrained eyes colts. I even induced her to discuss the matter with me until I told her that they were really

horses, and then the look of incredulous pity for my grown-up ignorance gave me one of the best insights I have ever had into the truth of the principle that children and adults live in different worlds."*

The value, for both parent and child, of entering into each other's experiences through conversation, is here made very evident. And for this practical kind of educative work, every parent has opportunities whose name is legion.

Discrimination is another psychological essential to clear and usable knowledge. One reason why so many people fail to call a spade a spade is because they don't know it is one: they can not discriminate between a spade and a shovel, or a pickaxe. How often we meet those who can not see the boundary line between a good joke and a piece of horse play, between the wholesome funny and the sickly silly. The farmer can describe an ignorant city man in just seven words: "He doesn't know chickens from turkeys." There is even a lower grade of contempt for those who "don't know beans."

Now, discrimination must begin in the

^{*} C. H. Judd: Genetic Psychology, pp. 9-10.

senses. At first, the child can not tell blue from green, or yellow from orange - some adults can not. Get him to tell you the colors of all the objects in the room, all the colors in your and his suits and dresses, all the tastes in a given meal, and the smell of everything in the kitchen. Help him to see, instead of "flowers" merely, the rose, the geranium, the lilac, fuchsias and bachelor's buttons. A "dog," if you look at him closely enough, turns out to be a collie, a shepherd, a hound, a bulldog or a terrier. If you can not get at the real object or animal, fine pictures abound in books. Put up a small prize for the one who learns to describe the most kinds of anything, say of dogs, horses, or ships. You may enter the lists yourself, for quite likely you will be outdone.

Games will help here, as almost everywhere, and one of the players can go on with her housework as she plays. One may think of some kind of flower, or vehicle, or vegetable, the other attempting to guess it. Take turns with each other in naming the different gems in your make-believe jewelry shop: he who fails in his turn shall lose an imagi-

nary jewel. Play a "difference game:" What is the difference between a horse and a mule, cabbage and cauliflower, a shotgun and a rifle, a king and a president, a captain and a colonel?

In multitudes of happy ways we can break our mental materials up into different definite parts, each of which will have a specific use and meaning later on when we want to erect fairy castles of imagination or sturdy towers of thought.

Concluded

"It is, after all, the here and now that gives fundamental and self-sustaining motives to the child. The hope of immortality in the Valhalla of the grown-ups is not sufficient for his needs. No child really desiring to make a wagon has any motive referring to adult life except as a remote accessory to others. The teacher therefore backs this up by the hope of promotion to the next grade, and, as a step to this, perhaps a mark, or, at least, approval for the day.

"This is what the so-called practical teacher does, and having done so, he is supposed to get the child 'interested' in his work. Tremendous intellectual contortions are performed to show how this may be done, and the outcome is far from satisfactory. A much pleasanter and more effective role awaits the teacher who can see that what is needed is to turn the thing around, and half the time, at

least, to allow the child to interest him."

COLIN A. SCOTT: Social Education.

Ir would be ideal if we could fix the life calendar of a child in advance, and have a preformed plan for the developing of each trait when it was scheduled to appear. Such a calendar is at present impossible for all except the Creator of children. "But," the Busy Parent may inquire, "is it not possi-

ble to lay down a well chosen series of exercises to be used in educating each separate ability, in language, mathematics, and what not, no matter when that ability appears? "Yes, but that would require a number of large books instead of one small one. Our effort here is to gain such insight into the working of mind and hand as to make us resourceful in picking and choosing and concocting such things as are good for our children.

Now, it is to be hoped fervently that every child will acquire at some age, two most important items of an education, a working knowledge of his mother tongue and a practical acquaintance with his environment. Let us suppose, for example, that we wish to teach our child to speak, and to speak correctly. In the light of what we have learned, what shall we do?

Every baby, in the beginning, talks baby talk—for what other language does he know? Further, there is no harm in the mother's returning this salute of a-goo, ba-ba, and the like, to establish a basis of mutual understanding. But it is well to remember that the chief object is not to learn

his language, but to teach him ours. To learn our words, he must perceive them. When a foreigner speaks to you in his tongue, you want him to "slow down" so his words do not run into a babbling stream, but each comes out with a separate click. You are the "foreigner" in this case. Help the baby's perception by using only the few words you want him to learn first (names of objects are best), speak each slowly and distinctly, and have the object right there to reenforce your lesson; for experience and vocabulary should grow together from the beginning to the end of life.

One little orator, in telling the story of Red Riding Hood, persisted in saying that the food-chopper (he had seen his mother use one), instead of the wood-chopper, killed the wolf. Here was a lack of discrimination, but more forgivable than that of the lady who spoke of running her automobile into the "garbage" and leaving it there while she did her shopping. Both should be corrected by careful comparison. Probably the child needed also to be shown an axe, and the act of chopping. A wealth of perception enriches our ideas.

Considering now the child's later development, we observe at once that the more mature he grows, the more he is likely to be left to himself, and hence the more necessity for self-direction. But self-educating children are few. The Busy Parent must adopt one of two courses: he may follow the child's interests, or get the child to follow him. As Scott suggests, it is wise to let the children be the leaders at least half the time. The boy who wants to make a kite needs no urging, but only directions and materials. Then interest abounds, and concentration, the key to all high success, is secured without an effort.

But not every worthy enterprise is equipped with a self-starter. It is worth while to consider how we can set an interest to running so it will continue to go when it is out of our presence.

Curiosity seems to be rampant at all ages. You are washing dishes, say. Fill a tumbler brimful of water, clap a piece of paper over the top, and ask your boy what he thinks will happen if you turn it upside down. (Try it once or twice for yourself before you attempt to astonish him.) When he has beheld

the water supported on its paper base, let him have his own materials to try it with. Give him the kitchen funnel and let him perform the trick with the small end open, and with it closed. When he is ready with a little swarm of "whys," send him to the library to read all about atmospheric pressure. I have known pupils who, trained in this practical way, proved to be marvels, later, to their less fortunate classmates in physics. There is no limit to the uses of curiosity. The ancient philosopher was right when he said philosophy begins with wonder.

Imitation, suggestion, co-operation,—
these all indicate a kind of sympathetic
vibration of nervous systems, reminding one
of the sympathetic response of the piano
when a tone is sung to it. Your little daughter makes her cake or bread as you do, perhaps borrows some of your dough. What
causes it to rise? Why not put it in the icecream freezer and freeze it instead of baking
it? What makes so many little roads
through it when it is done? What traveled
there? You may be sure, mother, that your
domestic science will be more real and effective right then and there, than under the

somewhat artificial school conditions. And if you are too busy to explain, there are bulletins on bread-making. Books after baking: the library, after all, is but the upper story of kitchen and shop. And we imitate, not only what is actually present, but that which, long gone, or far distant, is made to live again in our minds through the wireless waves of print.

Self-assertion is another fundamental trait, useful as a motive. It is largely this which induces the child to "make-believe." In the make-believe world, he can be master of all he creates, driver of phantom horses, captain of great armies. Desire for power is not confined to the political boss. A boy will work for hours to rig an electric bell with which to wake his father in the morning! It is in self-assertion, too, that we find the secret of rivalry, competition, and, to some extent, emulation. It is this which makes many children industrious at school who are lazy at home. But there may be racy competition between parent and child. Who will fix mother's lock? The father springs up with a ready "I;" but the boy will beat him there with the screw-driver. Moreover,

this motive, aroused at school and carried home, will induce children to work for hours in a wholesome way, if only they are provided with something to work at. Who can raise the best corn, the finest flowers, the most aristocratic chickens?

Collecting and constructing have in them the common element of proprietorship. Probably there is nothing collectible that some child has not collected, stamps, coins, samples of wood, post cards, flowers, bones, minerals, leaves, buttons, insects, eggs, pictures. Here is a wealth of educative work that can be carried on best outside the schoolroom. Moreover, there is a "story" for each of these things, if only we can find it. Let the little collector feel that, as curator, he should be able to explain his collection to his friends.

Constructing, too, has limitless possibilities. The manual tasks found in the schools are but jots and tittles compared with what active children will undertake if the election is left to them. A simple set of tools will yield all the educative movements, and printed instructions for the making of toys and other articles are easily obtained. Pro-

fessor Edgar James Swift, having learned that unusually fine work in science was being accomplished in one of the New York schools, wrote to learn the secret of it, and received this reply: "The problem of arousing and maintaining interest in the study of elementary science is largely solved when boys can be induced to make something of their own. The home work is often crudely executed, but it delights the boys because it works. They become very enthusiastic when they fashion something useful. The study of pitch, for example, is not essentially interesting of itself, but it acquires an interest when boys can play melodies on violins of their own making." These violins were made from cigar boxes, and a "Cigar Box Orchestra " was organized. "In a word," so said the report, "boys make things for the fun of making them."

Play is another fundamental trait, a means that can be relied on to start interests which will lead to independent effort and so relieve the busy parent. Psychologically, play shows many elements; but it is largely childish art, an effort to create an ideal world, as the painter does in his picture, the novelist in

his book, the dramatist in his "play." Among children, too, we can find little realists who quickly tire of the make-believe business, preferring marbles to fairies; idealists who find the "little people" more real than big people; cubists who attempt to amaze all with their fantastic whims!

There is no limit to play-suggestions. Let us play farmer, build his barn, draw or cut out his animals, live his life. Why not make a little Dutch or Japanese house and furnish it? Pictures will show us how, - and there is much geography learned. We can even put on Japanese manners and play Japanese games. Let the children play Crusoe, and build his cave in a corner of the garden; or they may be painters or needlewomen, and make believe they are employed to produce the flags of the great nations. They can sail in a balloon over foreign lands and tell what they see - of course they must read the "stories" in order to do it well. Why not build a store and keep it? Mother can rebuy her broom and bake-pans. The little Washington may write to his mother, or little Martha may write to George. If only we can understand our player, we can push

the proper button and then let the educative activity run itself for a time.

Finally, a few suggestions concerning what we have called the upper story of the mind (see Chapter IV). We found that, like a factory, it can deal with those materials only which pass into it from the outside world. Consequently, our first duty is to furnish an abundance of practical perceptive experience, for out of this abundance memory thrives, imagination flowers, and thought forms its solid tissues.

Memory is most often abused, perhaps. Too many children are made to feel that they should remember everything, and verbatim. This is no more their duty than it is the duty of every farmer to raise every possible crop. Let each remember according to the trend of his own mind.

But most of us are interested in what we eat, drink, and wear. Let each read the story of something found on the dinner table and tell the family about it at meal time. Talk it all over and drive the matter home by pleasant repetition. And if, on some household occasion, your child breaks out in poetry and repeats a memory gem, don't let him

feel that he is doing a most strange thing, which puts him out of harmony with his surroundings. We should all get farther if we slowed up and took time for a little æsthetic living.

Repetition, so necessary to memory, can also be provided through games, which children can play with each other. Let us have games of countries, flowers, trees, authors, and what not. Rhymes and jingles are good, only the jingles must not be more difficult to memorize than are the facts we wish to commit.

Freshness of knowledge can be insured through the family discussion of current events. A building is going up in your community. Whence come the materials? Who is the architect? What is the style? Here is the opening for whole chapters of architecture, especially if pictures are available for illustration. Mona Lisa is stolen! From which gallery? Who painted the picture? When? What other great paintings belong to this country or century? Is not this more refreshing than to talk of the weeds and cats in your neighbor's back yard?

Imagination is pathetically neglected. If there is anything which emphatically distinguishes man from the lower animals, it is this power of picture-building. And contrary to a common statement, looking at pictures does not stifle imagination, but improves it, if we go about the process inquiringly. This wizard power is ever with us, and can brighten every dull hour. I know a father and daughter who frequently while away a half hour of waiting by playing the game of "If." It was suggested by Mother Goose:

"If all the trees were one tree, What a great tree that would be!"

Put in the place of "trees" every thing you can think of, taking turns, and you have the game.

In psychology classes, when approaching the study of imagination, we sometimes indulge in a contest to see who can concoct a story of biggest caliber. There is no reason why children should not do the same. It will not encourage lying, but discourage it; for one reason why children lie is because they have no other exercise and outlet for

imagination. A little indulgence of this faculty will only make clear to them, by contrast, the difference between truth and fiction.

Again, one can stimulate the scientific imagination to research by all sorts of queer questions. More usually, perhaps, it is the child who stimulates the parent; but it works well both ways. What do the birds see above the clouds? If you dug through the earth, where should you come out? Could the sun fall into the sea? What if Columbus hadn't discovered America? Is there any country where two plus two equals five? Write a story about "Crazy Land," where everything moves backward.

Imagination and play are twin sisters. Toys and toy-like structures help the imaginative process, just as the student of geometry is helped by a few chalk or pencil lines. Sticks become cows, buttons are people, and the chair is a car, a horse, an automobile. All this is good. Our general object should be to loosen up the mental joints, break up old combinations, and form as many new ones as possible, no matter how grotesque. This is the direct road to originality of a most valuable kind.

Thinking is only imagination with its wings clipped, so that instead of soaring into the limitless ether, it is confined within the palings of the "actual" world. Let your child imagine himself a disease germ or a drop of water, and tell the story of his life. Here he is imagining, but keeps carefully within the limits of what he has learned, what is true. If we could procure the total of Edison's mental pictures and subtract those which turned out to be true, there would remain a scrap heap larger than any now found about his laboratory.

It is a common complaint that in school, pupils do not learn to think. One great reason for this is that thinking is costly in time, and the teacher of fifty pupils can not wait for the individual brain to catch up in its cogitations. Moreover, school life is often barren of real problems: the nuts are either all cracked in advance, or they have such a taste that no one cares to crack them.

Not so outside. Problems are staring and shaking their fists at the boy from every cranny and corner. He should neither be left to grapple with them alone, nor yet have them all banished or killed by one thwack

of a superior intellect — his parent's. We should give him practice by putting ourselves on his level and thinking with him, playing the game together, so to speak, to see who can take the next step forward. For example, suppose your child, in the case of the inverted glass filled with water, concludes that the paper sticks to the glass in some way and holds the water in. Let him get a straw or an onion stem, suck it full of water, and hold his finger over the top. Surely, the paper does not support the water now. Further, let him suck water from a bottle through a straw or a clay pipe-stem; and then, having filled the bottle to the brim, put a little clay or plasticine around the tube so as to fill completely the space between it and the neck of the bottle, and try again to suck out water. Does he "suck" the water up (when it comes), or does something push it up? And what can that something be? What was shut out by the plasticine?

A gentleman and a lad who called him "Father," were standing on the platform of an elevated railway, when the boy, observing the signs falling and rising as the trains came and went, asked what made them move

in that way. A quick, stifling solution could have been given in a word, but the father chose the wiser way.

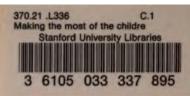
"Do you see anything fastened to the signs?" he asked.

The boy looked again and reported that there were chains attached to them. His eye ran along these chains from point to point, pulley to pulley, till at length he found them terminating in handles which hung not far from him. This was suggestive, and he continued to watch until he saw a trainman step forward, seize these handles, and change the signs. His question was answered. While this little problem did not require profound thought, it encouraged the true spirit of first-hand inquiry and investigation. With all our getting, shall we not get understanding?

It is in these ways, by taking advantage of the child's own wonder moods, by inciting him to use all his natural powers, and by providing him with facilities for their exercise, that we can hope to make his activities yield the highest educative return.

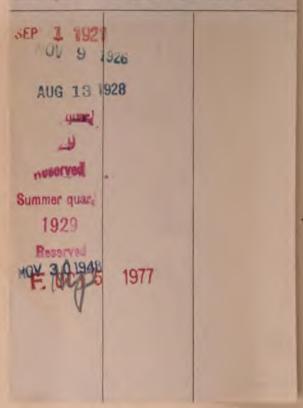
THE END.

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